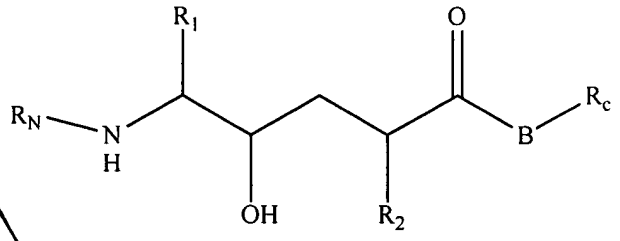
WE CLAIM:

1. A compound of the formula (XII):



(XII)

where R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) –CF_3,

(C) -F, Cl, -Br or -I,

(D) C_1-C_3 alkoxy,

(E) –O-CF_3,

(F) -NH_2,

(G) -OH, or

(H) -C≡N,

(V) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) $-NH_2$,

(7) -OH, or

(8) -C≡N,

(VI) $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-$(R_{1\text{-heterocycle}})$ where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) $-CF_3$,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) $-O-CF_3$,

(7) $-NH_2$,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) alkyl, or

(III) -C_1-C_5 alkyl-$R_{2\text{-}1}$ where $R_{2\text{-}1}$ is cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_N is:

(I) $R_{N\text{-}1}$-X_N- where X_N is:

(A) –CO-,

(B) $–SO_2$-,

(C) $-(CR'R")_{1-6}$ where R' and R" are the same or different and are –H or C_1-C_4 alkyl,

(D) $–CO-(CR'R")_{1-6}-X_{N-1}$ where X_{N-1} is –O-, -S- or –NR'R"- and where R' and R" are as defined above, or

(E) a single bond;

where R_{N-1} is:

(A) R_{N-aryl} where R_{N-aryl} is phenyl, biphenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are:

(a) -H,

(b) -C_1-C_6 alkyl unsubstituted or substituted with

(i) -OH, or

(ii) $-NH_2$,

(c) -C_1-C_6 alkyl unsubstituted or substituted with –F, -Cl, -Br, or -I,

(d) -C_3-C_7 cycloalkyl,

(e) -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl),

(f) -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl),

(g) -C_1-C_6 alkenyl with one or two double bonds,

(h) -C_1-C_6 alkynyl with one or two triple bonds,

(i) -C_1-C_6 alkyl chain with one double bond and one triple bond,

(j) -$R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, or

(k) -$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) -CO-$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) -CO-$R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with C_1-C_3 alkyl,

(13) -CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is:

(a) alkyl, or

(b) -$(CH_2)_{0\text{-}2}$-($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is as defined above,

(14) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH,

(28) -S-(C_1-C_6 alkyl),

(29) C_1-C_6 alkyl unsubstituted or substituted with halo,

(30) –O-(C_1-C_6 alkyl unsubstituted or substituted with halo), or

(31) –O-phenyl,

(32) (C_1-C_6 alkyl) substituted with -CO-NH-C(=O)-,

(B) -$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(1) pyridinyl,

(2) pyrimidinyl,

(3) quinolinyl,

(4) indenyl,

(5) indanyl,

(6) benzothiophenyl,

(7) indolyl,

(8) indolinyl,

(9) pyridazinyl,

(10) pyrazinyl,

(11) isoindolyl,

(12) isoquinolyl,

(13) quinazolinyl,

(14) quinoxalinyl,

(15) phthalazinyl,

(16) imidazolyl,

(17) isoxazolyl,

(18) pyrazolyl,

(19) oxazolyl,

(20) thiazolyl,

(21) indolizinyl,

(22) indazolyl,

(23) benzothiazolyl,

(24) benzimidazolyl,

(25) benzofuranyl,

(26) furanyl,

(27) thienyl,

(28) pyrrolyl,

(29) oxadiazolyl,

(30) thiadiazolyl,

(31) triazolyl,

(32) tetrazolyl,

(33) 1, 4-benzodioxan

(34) purinyl,

(35) oxazolopyridinyl,

(36) imidazopyridinyl,

(37) isothiazolyl,

(38) naphthyridinyl,

(39) cinnolinyl,

(40) carbazolyl,

(41) β-carbolinyl,

(42) isochromanyl,

(43) chromanyl,

(44) furazanyl,

(45) tetrahydroisoquinoline,

(46) isoindolinyl,

(47) isobenzotetrahydrofuranyl,

(48) isobenzotetrahydrothienyl,

(49) isobenzothiophenyl,

(50) benzoxazolyl, or

(51) pyridopyridinyl,

where the $R_{N\text{-heteroaryl}}$ group is bonded by any atom of the parent $R_{N\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{N\text{-heteroaryl}}$

group replaces the hydrogen atom and its bond, where $R_{N\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) $-CO-R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) $-CO-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(13) $-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(14) $-SO_2-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) $-SO_2$-(C_3-C_{12} alkyl),

(17) $-NH-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) $-NH-CO-N(C_1\text{-}C_3 \text{ alkyl})_2$,

(19) $-N-CS-N(C_1\text{-}C_3 \text{ alkyl})_2$,

(20) $-N(C_1\text{-}C_3 \text{ alkyl})-CO-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) $-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) $-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH, or

(28) -S-(C_1-C_6 alkyl),

(29) (C_1-C_6 alkyl) substituted with -CO-OH and -NH-C(=O)-,

(C) -$R_{N\text{-}aryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(D) -$R_{N\text{-}aryl}$-$R_{N\text{-}heteroaryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(E) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(F) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(G) -$R_{N\text{-}aryl}$-O-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(H) -$R_{N\text{-}aryl}$-S-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(I) -$R_{N\text{-}heteroaryl}$-O-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(J) -$R_{N\text{-}heteroaryl}$-S-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(K) -$R_{N\text{-}aryl}$-CO-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(L) -$R_{N\text{-}aryl}$-CO-$R_{N\text{-}heteroaryl}$ where -$R_{N\text{-}aryl}$ and $R_{N\text{-}heteroaryl}$ are as defined above,

(M) -$R_{N\text{-}aryl}$-SO_2-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(N) -$R_{N\text{-}heteroaryl}$-CO-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(O) -$R_{N\text{-}heteroaryl}$-SO_2-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(P) –$R_{N\text{-}aryl}$-O-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}aryl}$ is as defined above,

(Q) –$R_{N\text{-}aryl}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}aryl}$ is as defined above,

(R) $-R_{N\text{-heteroaryl}}$-O-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-heteroaryl}}$ is as defined above, or

(S) $-R_{N\text{-heteroaryl}}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-heteroaryl}}$ is as defined above, or

(II) –CO-(C_1-C_6 alkyl) where alkyl is unsubstituted or substituted with:

(A) -OH,

(B) -C_1-C_6 alkoxy,

(C) -C_1-C_6 thioalkoxy,

(D) –CO-O-$R_{N\text{-}8}$ where $R_{N\text{-}8}$ is –H, C_1-C_6 alkyl or -phenyl,

(E) –CO-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(F) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(G) -SO_2-(C_1-C_8 alkyl),

(H) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(I) -NH-CO-(C_1-C_6 alkyl),

(J) -NH-CO-O-$R_{N\text{-}8}$ where $R_{N\text{-}8}$ is as defined above,

(K) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(L) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(M) -O-CO-(C_1-C_6 alkyl),

(N) -O-CO-$NR_{N\text{-}8}R_{N\text{-}8}$ where $R_{N\text{-}8}$ are the same or different and are as defined above, or

(O) -O-(C_1-C_5 alkyl)-COOH;

where B is -O-, -NH-, or -N(C_1-C_6 alkyl)-; and

where R_C is:

(I) C_1-C_8 alkyl unsubstituted or substituted with –OH, –O-phenyl, halo, or (C_1-C_6 alkoxy unsubstituted or substituted with halo), or

(II) $-C(R_{C-1})(R_{C-2})-CO-NH-R_{C-3}$ where R_{C-1} and R_{C-2} are the same or different and are:

(A) -H,

(B) $-C_1-C_6$ alkyl,

(C) $-(C_1-C_4$ alkyl$)-R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined for R_{N-aryl},

(D) $-(C_1-C_4$ alkyl$)-R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined for $R_{N-heteroaryl}$, and $R_{N-heteroaryl}$ is as defined above,

(E) $-(C_1-C_4$ alkyl$)-R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined for $R_{N-heterocycle}$, and $R_{N-heterocycle}$ is as defined above,

(F) $-R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,

(G) $-R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined above,

(H) $-(CH_2)_{1-4}$-OH,

(I) $-(CH_2)_{1-4}-R_{C-4}-(CH_2)_{1-4}-R_{C'-aryl}$ where R_{C-4} is –O-, -S-, -NH-, or $-NR_{C-5}-$ where R_{C-5} is C_1-C_6 alkyl, and where $R_{C'-aryl}$ is as defined above,

(J) $-(CH_2)_{1-4}-R_{C-4}-(CH_2)_{1-4}-R_{C-heteroaryl}$ where R_{C-4} and $R_{C-heteroaryl}$ are as defined above, or

(K) $-R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined above,

and where R_{C-3} is:

(A) -H,

(B) $-C_1-C_6$ alkyl, substituted or unsubstituted with:

(1) -H,

(2) $-C_1-C_6$ alkyl,

(3) $-(C_1-C_4$ alkyl$)-R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined for R_{N-aryl},

(4) $-(C_1-C_4$ alkyl$)-R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined for $R_{N-heteroaryl}$, and $R_{N-heteroaryl}$ is as defined above,

(5) $-(C_1-C_4$ alkyl$)-R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined for $R_{N-heterocycle}$, and $R_{N-heterocycle}$ is as defined above,

(6) $-R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,

(7) $-R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined above,

(8) $-(CH_2)_{1-4}$-OH,

(9) -$(CH_2)_{1-4}$-R_{C-4}-$(CH_2)_{1-4}$-$R_{C'-aryl}$ where R_{C-4} is –O-, -S-, -NH-, or

–NR_{C-5}- where R_{C-5} is C_1-C_6 alkyl, and where $R_{C'-aryl}$ is as defined above,

(10) -$(CH_2)_{1-4}$-R_{C-4}-$(CH_2)_{1-4}$-$R_{C-heteroaryl}$ where R_{C-4} and $R_{C-heteroaryl}$ are as defined above, or

(11) –$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined above,

(12) -CO-OH and -NH-C (=O)-,

(C) –$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined above,

(D) –$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,

(E) –$R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined above,

(F) -(C_1-C_4 alkyl)-$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined above,

(G) -(C_1-C_4 alkyl)-$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,

(H) -(C_1-C_4 alkyl)-$R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined above, or

(J) -$C(R_{C-5})(R_{C-6})$-CO-NH-$C(R_{C-7})(R_{C-8})$-COOH, where R_{C-5}, R_{C-6}, R_{C-7}, and R_{C-8} are the same or different, and are as defined for R_{C-1} and R_{C-2} and where R_{C-1} and R_{C-2} are as defined above;

or pharmaceutically acceptable salts thereof.

2. A compound according to claim 1, wherein R_1 is C_1 - C_6 alkyl.

3. A compound according to claim 2, wherein R_1 is -C_4 alkyl.

4. A compound according to claim 3, wherein R_1 is -$CH_2CH(CH_3)_2$.

5. A compound according to claim 1, wherein R_2 is -alkyl.

6. A compound according to claim 5, wherein R_2 is C_1 alkyl.

7. A compound according to claim 6, wherein R_2 is -CH_3.

8. A compound according to claim 1, wherein R_N is:

(I) R_{N-1}-X_N- where X_N is:

(A) –CO-,

(B) $–SO_2$-,

(C) -$(CR'R")_{1-6}$ where R' and R" are the same or different and are –H or C_1-C_4 alkyl,

(D) –CO-$(CR'R")_{1-6}$-X_{N-1} where X_{N-1} is –O-, -S- or –NR'R"- and where R' and R" are as defined above, or

(E) a single bond;

where R_{N-1} is:

(A) R_{N-aryl} where R_{N-aryl} is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) -CO-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are:

(a) -H,

(b) -C_1-C_6 alkyl unsubstituted or substituted with

(i) -OH, or

(ii) $-NH_2$,

(c) -C_1-C_6 alkyl unsubstituted or substituted with –F, -Cl, -Br, or -I,

(d) -C_3-C_7 cycloalkyl,

(e) -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl),

(f) -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl),

(g) -C_1-C_6 alkenyl with one or two double bonds,

(h) -C_1-C_6 alkynyl with one or two triple bonds,

(i) -C_1-C_6 alkyl chain with one double bond and one triple bond,

(j) -$R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, or

(k) -$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) -CO-$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) -CO-$R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with C_1-C_3 alkyl,

(13) -CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is:

(a) alkyl, or

(b) -$(CH_2)_{0\text{-}2}$-($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is as defined above,

(14) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH,

(28) -S-(C_1-C_6 alkyl),

(29) C_1-C_6 alkyl unsubstituted or substituted with halo,

(30) –O-(C_1-C_6 alkyl unsubstituted or substituted with halo), or

(31) –O-phenyl,

(32) (C_1-C_6 alkyl) substituted with -CO-NH-C(=O)-,

(B) -$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(1) pyridinyl,

(2) pyrimidinyl,

(3) quinolinyl,

(4) indenyl,

(5) indanyl,

(6) benzothiophenyl,

(7) indolyl,

(8) indolinyl,

(9) pyridazinyl,

(10) pyrazinyl,

(11) isoindolyl,

(12) isoquinolyl,

(13) quinazolinyl,

(14) quinoxalinyl,

(15) phthalazinyl,

(16) imidazolyl,

(17) isoxazolyl,

(18) pyrazolyl,

(19) oxazolyl,

(20) thiazolyl,

(21) indolizinyl,

(22) indazolyl,

(23) benzothiazolyl,

(24) benzimidazolyl,

(25) benzofuranyl,

(26) furanyl,

(27) thienyl,

(28) pyrrolyl,

(29) oxadiazolyl,

(30) thiadiazolyl,

(31) triazolyl,

(32) tetrazolyl,

(33) 1, 4-benzodioxan

(34) purinyl,

(35) oxazolopyridinyl,

(36) imidazopyridinyl,

(37) isothiazolyl,

(38) naphthyridinyl,

(39) cinnolinyl,

(40) carbazolyl,

(41) β-carbolinyl,

(42) isochromanyl,

(43) chromanyl,

(44) furazanyl,

(45) tetrahydroisoquinoline,

(46) isoindolinyl,

(47) isobenzotetrahydrofuranyl,

(48) isobenzotetrahydrothienyl,

(49) isobenzothiophenyl,

(50) benzoxazolyl, or

(51) pyridopyridinyl,

where the $R_{N\text{-heteroaryl}}$ group is bonded by any atom of the parent $R_{N\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{N\text{-heteroaryl}}$

group replaces the hydrogen atom and its bond, where $R_{N\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) $-CO-R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) $-CO-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(13) $-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(14) $-SO_2-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) $-SO_2$-(C_3-C_{12} alkyl),

(17) $-NH-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) $-NH-CO-N(C_1\text{-}C_3\text{ alkyl})_2$,

(19) $-N-CS-N(C_1\text{-}C_3\text{ alkyl})_2$,

(20) $-N(C_1\text{-}C_3\text{ alkyl})-CO-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) $-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) $-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH, or

(28) -S-(C_1-C_6 alkyl),

(29) (C_1-C_6 alkyl) substituted with -CO-OH and -NH-C(=O)-,

(C) -$R_{N\text{-}aryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(D) -$R_{N\text{-}aryl}$-$R_{N\text{-}heteroaryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(E) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(F) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(G) -$R_{N\text{-}aryl}$-O-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(H) -$R_{N\text{-}aryl}$-S-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(I) -$R_{N\text{-}heteroaryl}$-O-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(J) -$R_{N\text{-}heteroaryl}$-S-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(K) -$R_{N\text{-}aryl}$-CO-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(L) -$R_{N\text{-}aryl}$-CO-$R_{N\text{-}heteroaryl}$ where -$R_{N\text{-}aryl}$ and $R_{N\text{-}heteroaryl}$ are as defined above,

(M) -$R_{N\text{-}aryl}$-SO_2-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(N) -$R_{N\text{-}heteroaryl}$-CO-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(O) -$R_{N\text{-}heteroaryl}$-SO_2-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(P) –$R_{N\text{-}aryl}$-O-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}aryl}$ is as defined above,

(Q) –$R_{N\text{-}aryl}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}aryl}$ is as defined above,

(R) $-R_{N\text{-heteroaryl}}$-O-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-heteroaryl}}$ is as defined above, or

(S) $-R_{N\text{-heteroaryl}}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-heteroaryl}}$ is as defined above.

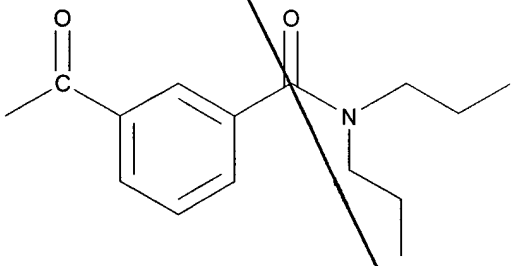
9. A compound according to claim 8, wherein X_N is -CO-.

10. A compound according to claim 9, wherein $R_{N\text{-}1}$ is substituted or unsubstituted $R_{N\text{-aryl}}$.

11. A compound according to claim 10, wherein $R_{N\text{-aryl}}$ is substituted or unsubstituted phenyl.

12. A compound according to claim 11, wherein phenyl is substituted with $-CONPr_2$.

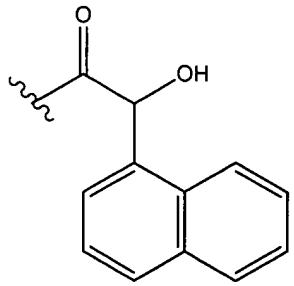
13. A compound according to claim 12, wherein R_N is



14. A compound according to claim 10, wherein $R_{N\text{-aryl}}$ is substituted 1-naphthyl.

15. A compound according to claim 14, wherein 1-naphthyl is substituted with -CHOH.

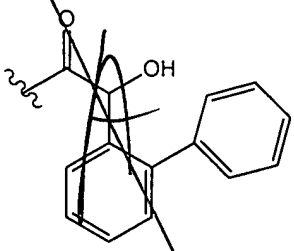
16. A compound according to claim 15, wherein R_N is:



17. A compound according to claim 10, wherein $R_{N\text{-}aryl}$ is substituted biphenyl.

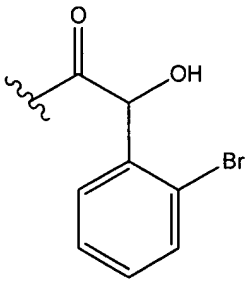
18. A compound according to claim 17, wherein biphenyl is substituted with -CHOH.

19. A compound according to claim 18, wherein R_N is:



20. A compound according to claim 11, wherein phenyl is substituted with -CHOH and -Br.

21. A compound according to claim 20, wherein R_N is:



22. A compound according to claim 1, wherein R_N is chosen from:

(II) –CO-(C_1-C_6 alkyl) where alkyl is unsubstituted or substituted with:

(A) -OH,

(B) -C_1-C_6 alkoxy,

(C) -C_1-C_6 thioalkoxy,

(D) –CO-O-R_{N-8} where R_{N-8} is –H, C_1-C_6 alkyl or -phenyl,

(E) –CO-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(F) -CO-R_{N-4} where R_{N-4} is as defined above,

(G) -SO_2-(C_1-C_8 alkyl),

(H) -SO_2-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(I) -NH-CO-(C_1-C_6 alkyl),

(J) -NH-CO-O-R_{N-8} where R_{N-8} is as defined above,

(K) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(L) -R_{N-4} where R_{N-4} is as defined above,

(M) -O-CO-(C_1-C_6 alkyl),

(N) -O-CO-$NR_{N-8}R_{N-8}$ where R_{N-8} are the same or different and are as defined above, or

(O) -O-(C_1-C_5 alkyl)-COOH.

23. A compound according to claim 22, wherein R_N is substituted -CO-(C_1-C_6 alkyl).

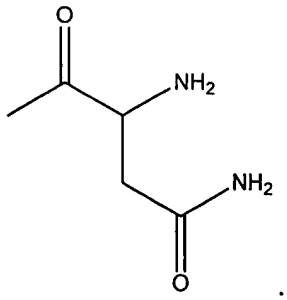
24. A compound according to claim 23, wherein R_N is substituted with -OH, -C_1-C_6 thioalkoxy, -CO-O-R_{N-8}, where R_{N-8} is -H, C_1-C_6 alkyl or -phenyl, or -CO-$NR_{N-2}R_{N-3}$, where R_{N-2} and R_{N-3} are the same or different and are as defined above.

25. A compound according to claim 24, wherien R_N is substituted -CO-(C_2 alkyl).

26. A compound according to claim 25, wherein -CO-(C_2 alkyl) is substituted with -CO-$NR_{N-2}R_{N-3}$.

27. A compound according to claim 26, wherein -CO-$NR_{N-2}R_{N-3}$ is -CO-NH_2.

28. A compound according to claim 27, wherein R_N is:



29. A compound according to claim 28, wherein the free amine that is beta to the carbonyl is protected with Prot, wherein Prot is *t*-butoxycarbonyl, benzyloxycarbonyl, formyl, trityl, acetyl, trichloroacetyl, dichloroacetyl, chloroacetyl, trifluoroacetyl, difluoroacetyl, fluoroacetyl, 4-phenylbenzyloxycarbonyl, 2-methylbenzyloxycarbonyl, 4-ethoxybenzyloxycarbonyl, 4-fluorobenzyloxycarbonyl, 4-chlorobenzyloxycarbonyl, 3-chlorobenzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, 2,4-dichlorobenzyloxycarbonyl, 4-bromobenzyloxycarbonyl, 3-bromobenzyloxycarbonyl, 4-nitrobenzyloxycarbonyl, 4-cyanobenzyloxycarbonyl, 2-(4-xenyl)isopropoxycarbonyl, 1,1-diphenyleth-1-yloxycarbonyl, 1,1-diphenylprop-1-yloxycarbonyl, 2-phenylprop-2-yloxycarbonyl, 2-(*p*-toluyl)prop-2-yloxycarbonyl, cyclopentanyloxycarbonyl, 1-methylcyclopentanyloxycarbonyl, cyclohexanyloxycarbonyl, 1-methylcyclohexanyloxycabonyl, 2-methylcyclohexanyloxycarbonyl, 2-(4-toluylsulfonyl)ethoxycarbonyl, 2-(methylsulfonyl)ethoxycarbonyl, 2-(triphenylphosphino)ethoxycarbonyl, fluorenylmethoxycarbonyl, 2-(trimethylsilyl)ethoxycarbonyl, allyloxycarbonyl, 1-(trimethylsilylmethyl)prop-1-enyloxycarbonyl, 5-benzisoxalylmethoxycarbonyl, 4-acetoxybenzyloxycarbonyl, 2,2,2-trichloroethoxycarbonyl, 2-ethynyl-2-propoxycarbonyl, cyclopropylmethoxycarbonyl, 4-

(decyloxyl)benzyloxycarbonyl, isobornyloxycarbonyl and 1-piperidyloxycarbonyl, 9-fluorenylmethyl carbonate, -CH-CH=CH_2, or phenyl-C(=N-)-H.

30. A compound according to claim 29, wherein Prot is *t*-butoxycarbonyl, or benzyloxycarbonyl.

31. A compound according to claim 22, wherein R_N is doubly substituted -CO-(C_1-C_6 alkyl).

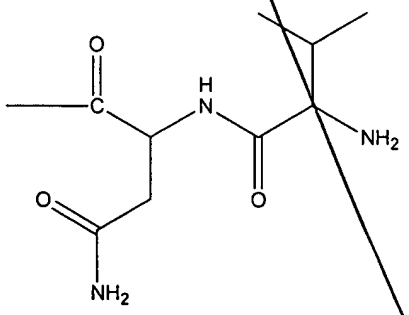
32. A compound according to claim 31, wherein one of the substituted with -OH, -C_1-C_6 thioalkoxy, -CO-O-R_{N-8}, where R_{N-8} is -H, C_1-C_6 alkyl or -phenyl, or -CO-$NR_{N-2}R_{N-3}$, where R_{N-2} and R_{N-3} are the same or different and are as defined above; and the other substitution is with -NH-CO-(C_1-C_6 alkyl).

33. A compound according to claim 32, wherein -NH-CO-(C_1-C_6 alkyl) is substituted.

34. A compound according to claim 33, wherein C_1-C_6 alkyl is C_2, one substituent is -$CONH_2$ and one substituent is -NH-CO-C_4 alkyl.

35. A compound according to claim 34, wherein C_4 alkyl is substituted with -NH_2.

36. A compound according to claim 35, wherein R_N is



37. A compound according to claim 36, wherein the free amine that is beta to the carbonyl is protected with Prot, where Prot is *t*-butoxycarbonyl, benzyloxycarbonyl, formyl, trityl, acetyl, trichloroacetyl, dichloroacetyl, chloroacetyl, trifluoroacetyl, difluoroacetyl, fluoroacetyl, 4-phenylbenzyloxycarbonyl, 2-methylbenzyloxycarbonyl, 4-ethoxybenzyloxycarbonyl, 4-fluorobenzyloxycarbonyl, 4-chlorobenzyloxycarbonyl, 3-chlorobenzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, 2,4-dichlorobenzyloxycarbonyl, 4-bromobenzyloxycarbonyl, 3-bromobenzyloxycarbonyl, 4-nitrobenzyloxycarbonyl, 4-cyanobenzyloxycarbonyl, 2-(4-xenyl)isopropoxycarbonyl, 1,1-diphenyleth-1-yloxycarbonyl, 1,1-diphenylprop-1-yloxycarbonyl, 2-phenylprop-2-yloxycarbonyl, 2-(*p*-toluyl)prop-2-yloxycarbonyl, cyclopentanyloxycarbonyl, 1-methylcyclopentanyloxycarbonyl, cyclohexanyloxycarbonyl, 1-methylcyclohexanyloxycabonyl, 2-methylcyclohexanyloxycarbonyl, 2-(4-toluylsulfonyl)ethoxycarbonyl, 2-(methylsulfonyl)ethoxycarbonyl, 2-(triphenylphosphino)ethoxycarbonyl, fluorenylmethoxycarbonyl, 2-(trimethylsilyl)ethoxycarbonyl, allyloxycarbonyl, 1-(trimethylsilylmethyl)prop-1-enyloxycarbonyl, 5-benzisoxalylmethoxycarbonyl, 4-acetoxybenzyloxycarbonyl, 2,2,2-trichloroethoxycarbonyl, 2-ethynyl-2-propoxycarbonyl, cyclopropylmethoxycarbonyl, 4-(decyloxyl)benzyloxycarbonyl, isobornyloxycarbonyl and 1-piperidyloxycarbonyl, 9-fluorenylmethyl carbonate, -CH-CH=CH_2, or phenyl-C(=N-)-H.

38. A compound according to claim 37, wherein Prot is *t*-butoxycarbonyl, or benzyloxycarbonyl.

39. A compound according to claim 1, wherein R_C is chosen from:

(II) -C(R_{C-1})(R_{C-2})-CO-NH-R_{C-3} where R_{C-1} and R_{C-2} are the same or different and are:

(A) -H,

(B) -C_1-C_6 alkyl,

(C) -(C_1-C_4 alkyl)-$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined for R_{N-aryl},

(D) -(C_1-C_4 alkyl)-$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined for $R_{N-heteroaryl}$, and $R_{N-heteroaryl}$ is as defined above,

(E) -(C_1-C_4 alkyl)-$R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined for $R_{N\text{-heterocycle}}$, and $R_{N\text{-heterocycle}}$ is as defined above,

(F) –$R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(G) –$R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(H) –$(CH_2)_{1\text{-}4}$-OH,

(I) -$(CH_2)_{1\text{-}4}$-$R_{C\text{-}4}$-$(CH_2)_{1\text{-}4}$-$R_{C'\text{-aryl}}$ where $R_{C\text{-}4}$ is –O-, -S-, -NH-, or –$NR_{C\text{-}5}$- where $R_{C\text{-}5}$ is C_1-C_6 alkyl, and where $R_{C'\text{-aryl}}$ is as defined above,

(J) -$(CH_2)_{1\text{-}4}$-$R_{C\text{-}4}$-$(CH_2)_{1\text{-}4}$-$R_{C\text{-heteroaryl}}$ where $R_{C\text{-}4}$ and $R_{C\text{-heteroaryl}}$ are as defined above, or

(K) –$R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

and where $R_{C\text{-}3}$ is:

(A) -H,

(B) -C_1-C_6 alkyl,

(C) –$R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

(D) –$R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(E) –$R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(F) -(C_1-C_4 alkyl)-$R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

(G) -(C_1-C_4 alkyl)-$R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(H) -(C_1-C_4 alkyl)-$R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above, or

(J) -$C(R_{C\text{-}5})(R_{C\text{-}6})$-CO-NH-$C(R_{C\text{-}7})(R_{C\text{-}8})$-COOH, where $R_{C\text{-}5}$, $R_{C\text{-}6}$, $R_{C\text{-}7}$, and $R_{C\text{-}8}$ are the same or different, and are as defined for $R_{C\text{-}1}$ and $R_{C\text{-}2}$ and where $R_{C\text{-}1}$ and $R_{C\text{-}2}$ are as defined above.

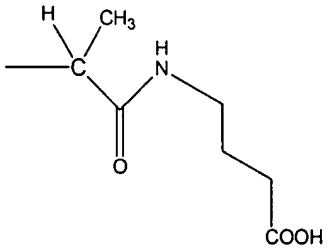
40. A compound according to claim 39, wherein $R_{C\text{-}1}$ is -H, and $R_{C\text{-}2}$ is -CH_3.

41. A compound according to claim 40, wherein $R_{C\text{-}3}$ is C_2 alkyl.

42. A compound accoding to claim 41, wherein said C_2 alkyl is substituted.

43. A compound according to claim 42, wherein said C_2 alkyl is substituted with -COOH.

44. A compound according to claim 43, wherein R_C is

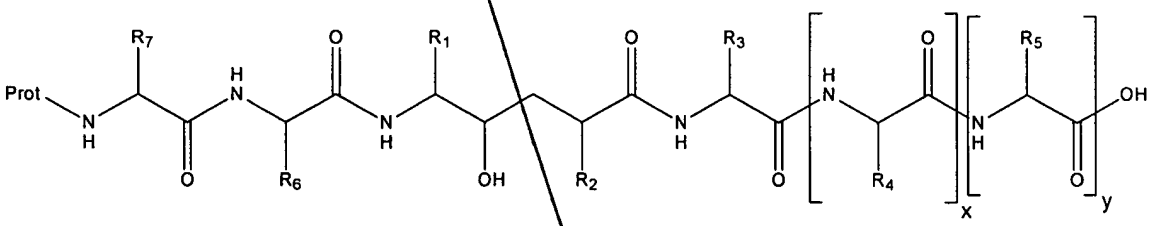


45. A compound according to claim 39, wherein R_{C-3} is $-C(R_{C-5})(R_{C-6})-CO-NH-C(R_{C-7})(R_{C-8})-COOH$, where R_{C-5}, R_{C-6}, R_{C-7}, and R_{C-8} are the same or different, and are as defined for R_{C-1} and R_{C-2} and where R_{C-1} and R_{C-2} are as defined above.

46. A compound according to claim 45, wherein R_{C-5} is -H, and R_{C-6} is $-CH_2CH_2CO_2H$.

47. A compound according to claim 46, wherein R_{C-7} is -H, and R_{C-8} is $-CH_2$-phenyl.

48. A compound of the formula (XIII)



(XIII)

wherein R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -$(R_{1\text{-aryl}})$ where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) $-CF_3$,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) $-O-CF_3$,

(F) $-NH_2$,

(G) -OH, or

(H) -C≡N,

(V) -$(CH_2)_{0-6}$-alkyl -$(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) $-NH_2$,

(7) -OH, or

(8) $-C\equiv N$,

(VI) $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-$(R_{1\text{-heterocycle}})$ where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) $-CF_3$,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) $-O-CF_3$,

(7) $-NH_2$,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) C_1-C_6 alkyl, or

(III) $-(CH_2)_{0\text{-}4}-R_{2\text{-}1}$ where $R_{2\text{-}1}$ is (C_3-C_6)cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_3, R_4, R_5, R_6, and R_7, are each independently -H, $-CH_3$, $-CH(CH_3)_2$, $-CH_2CH(CH_3)_2$, $-CH(CH)CH_2CH_3$, $-CH_2CH_2{*}CH_2$, wherein the $*CH_2$ is bonded to the adjancent NH to form a five membered heterocycle, $-CH_2$-phenyl, $-CH_2$(phenol), $-CH_2$-(3-indole), $-CH_2SH$, $-CH_2CH_2SCH_3$, $-CH_2OH$, $-CH(OH)CH_3$,-CH2CH2CH2CH2NH_3^+, $-CH_2CH_2CH_2(NH)C(=NH_2^+)NH_2$, $-CH_2$-(5-(3H-imidazol-1-ium)), $-CH_2COO^-$, $-CH_2CH_2COO^-$, CH_2CONH_2, or $-CH_2CH_2CONH_2$;

where x is 1 or 0;

where y is 1 or 0; and

where Prot is *t*-butoxycarbonyl, benzyloxycarbonyl, formyl, trityl, acetyl, trichloroacetyl, dichloroacetyl, chloroacetyl, trifluoroacetyl, difluoroacetyl, fluoroacetyl, 4-phenylbenzyloxycarbonyl, 2-methylbenzyloxycarbonyl, 4-ethoxybenzyloxycarbonyl,

4-fluorobenzyloxycarbonyl, 4-chlorobenzyloxycarbonyl, 3-chlorobenzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, 2,4-dichlorobenzyloxycarbonyl, 4-bromobenzyloxycarbonyl, 3-bromobenzyloxycarbonyl, 4-nitrobenzyloxycarbonyl, 4-cyanobenzyloxycarbonyl, 2-(4-xenyl)isopropoxycarbonyl, 1,1-diphenyleth-1-yloxycarbonyl, 1,1-diphenylprop-1-yloxycarbonyl, 2-phenylprop-2-yloxycarbonyl, 2-(*p*-toluyl)prop-2-yloxycarbonyl, cyclopentanyloxycarbonyl, 1-methylcyclopentanyloxycarbonyl, cyclohexanyloxycarbonyl, 1-methylcyclohexanyloxycabonyl, 2-methylcyclohexanyloxycarbonyl, 2-(4-toluylsulfonyl)ethoxycarbonyl, 2-(methylsulfonyl)ethoxycarbonyl, 2-(triphenylphosphino)ethoxycarbonyl, fluorenylmethoxycarbonyl, 2-(trimethylsilyl)ethoxycarbonyl, allyloxycarbonyl, 1-(trimethylsilylmethyl)prop-1-enyloxycarbonyl, 5-benzisoxalylmethoxycarbonyl, 4-acetoxybenzyloxycarbonyl, 2,2,2-trichloroethoxycarbonyl, 2-ethynyl-2-propoxycarbonyl, cyclopropylmethoxycarbonyl, 4-(decyloxyl)benzyloxycarbonyl, isobornyloxycarbonyl and 1-piperidyloxycarbonyl, 9-fluorenylmethyl carbonate, -CH-CH=CH_2, or phenyl-C(=N-)-H, or pharmaceutically acceptable salts thereof.

49. A compound according to claim 48, wherein R_1 is C_1 - C_6 alkyl.

50. A compound according to 49, wherein R_1 is -C_4 alkyl.

51. A compound according to claim 50, wherein R_1 is -$CH_2CH(CH_3)_2$.

52. A compound according to claim 48, wherein R_2 is -alkyl.

53. A compound according to claim 52, wherein R_2 is C_1alkyl.

54. A compound according to claim 53, wherein R_2 is -CH_3.

55. A compound according to claim 48, wherein R_3 is -CH_3.

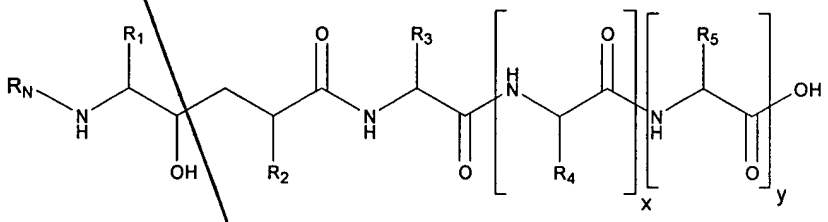
56. A compound according to claim 48, wherein x is 1.

57. A compound according to claim 56, wherein R_4 is $-CH_2CH_2COOH$.

58. A compound according to claim 56, wherein y is 1.

59. A compound according to claim 58, wherein R_5 is $-CH_2$-phenyl.

60. A compound of formula (XIV)



(XIV)

wherein R_N is:

(I) R_{N-1}-X_N- where X_N is:

(A) –CO-,

(C) -$(CR'R'')_{1-6}$ where R' and R" are the same or different and are –H or C_1-C_4 alkyl,

(D) –CO-$(CR'R'')_{1-6}$-X_{N-1} where X_{N-1} is –O-, -S- or –NR'R"- and where R' and R" are as defined above,

where R_{N-1} is:

(A) $R_{N\text{-aryl}}$ where $R_{N\text{-aryl}}$ is phenyl, biphenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) -CO-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are:

(a) -H,

(b) -C_1-C_6 alkyl unsubstituted or substituted with

(i) -OH, or

(ii) $-NH_2$,

(c) -C_1-C_6 alkyl unsubstituted or substituted with –F, -Cl, -Br, or -I,

(d) -C_3-C_7 cycloalkyl,

(e) -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl),

(f) -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl),

(g) -C_1-C_6 alkenyl with one or two double bonds,

(h) -C_1-C_6 alkynyl with one or two triple bonds,

(i) -C_1-C_6 alkyl chain with one double bond and one triple bond,

(j) -$R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, or

(k) -$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) -CO-$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) -CO-$R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-R_{N-4} where R_{N-4} is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with C_1-C_3 alkyl,

(13) -CO-O-R_{N-5} where R_{N-5} is

(a) alkyl, or

(b) -$(CH_2)_{0-2}$-($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is as defined above,

(14) -SO_2-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-R_{N-5} where R_{N-5} is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-R_{N-5} where R_{N-5} is as defined above,

(21) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above,

(22) -R_{N-4} where R_{N-4} is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH,

(28) -S-(C_1-C_6 alkyl),

(29) C_1-C_6 alkyl unsubstituted or substituted with halo,

(30) –O-(C_1-C_6 alkyl unsubstituted or substituted with halo), or

(31) –O-phenyl,

(32) (C_1-C_6 alkyl) substituted with -CO-NH-C(=O)-,

(B) -$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(1) pyridinyl,

(2) pyrimidinyl,

(3) quinolinyl,

(4) indenyl,

(5) indanyl,

(6) benzothiophenyl,

(7) indolyl,

(8) indolinyl,

(9) pyridazinyl,

(10) pyrazinyl,

(11) isoindolyl,

(12) isoquinolyl,

(13) quinazolinyl,

(14) quinoxalinyl,

(15) phthalazinyl,

(16) imidazolyl,

(17) isoxazolyl,

(18) pyrazolyl,

(19) oxazolyl,

(20) thiazolyl,

(21) indolizinyl,

(22) indazolyl,

(23) benzothiazolyl,

(24) benzimidazolyl,

(25) benzofuranyl,

(26) furanyl,

(27) thienyl,

(28) pyrrolyl,

(29) oxadiazolyl,

(30) thiadiazolyl,

(31) triazolyl,

(32) tetrazolyl,

(33) 1, 4-benzodioxan

(34) purinyl,

(35) oxazolopyridinyl,

(36) imidazopyridinyl,

(37) isothiazolyl,

(38) naphthyridinyl,

(39) cinnolinyl,

(40) carbazolyl,

(41) β-carbolinyl,

(42) isochromanyl,

(43) chromanyl,

(44) furazanyl,

(45) tetrahydroisoquinoline,

(46) isoindolinyl,

(47) isobenzotetrahydrofuranyl,

(48) isobenzotetrahydrothienyl,

(49) isobenzothiophenyl,

(50) benzoxazolyl, or

(51) pyridopyridinyl,

where the $R_{N\text{-heteroaryl}}$ group is bonded by any atom of the parent $R_{N\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{N\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{N\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) -F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) $-CO-R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) $-CO-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(13) $-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(14) -SO_2-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-R_{N-5} where R_{N-5} is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-R_{N-5} where R_{N-5} is as defined above,

(21) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above.

(22) -R_{N-4} where R_{N-4} is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH, or

(28) -S-(C_1-C_6 alkyl),

(29) (C_1-C_6 alkyl) substituted with -CO-OH and -NH-C(=O)-,

(C) -$R_{N\text{-}aryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(D) -$R_{N\text{-}aryl}$-$R_{N\text{-}heteroaryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(E) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(F) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(II) –CO-(C_1-C_6 alkyl) where alkyl is unsubstituted or substituted with:

(A) -OH,

(B) -C_1-C_6 alkoxy,

(C) -C_1-C_6 thioalkoxy,

(D) –CO-O-R_{N-8} where R_{N-8} is –H, C_1-C_6 alkyl or -phenyl,

(E) –CO-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(F) -CO-R_{N-4} where R_{N-4} is as defined above,

(G) -SO_2-(C_1-C_8 alkyl),

(H) -SO_2-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(I) -NH-CO-(C_1-C_6 alkyl),

(J) -NH-CO-O-R_{N-8} where R_{N-8} is as defined above,

(K) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(L) -R_{N-4} where R_{N-4} is as defined above,

(M) -O-CO-(C_1-C_6 alkyl),

(N) -O-CO-$NR_{N-8}R_{N-8}$ where R_{N-8} are the same or different and are as defined above, or

(O) -O-(C_1-C_6 alkyl)-COOH;

wherein R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) –CF_3,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) –O-CF_3,

(F) -NH_2,

(G) -OH, or

(H) -C≡N,

(V) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) -NH_2,

(7) -OH, or

(8) -C≡N,

(VI) -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-($R_{1\text{-heterocycle}}$) where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) –CF_3,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) –O-CF_3,

(7) -NH_2,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) C_1-C_6 alkyl, or

(III) -$(CH_2)_{0-4}$-R_{2-1} where R_{2-1} is (C_3-C_6)cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_3, R_4, and R_5, are each independently -H, -CH_3, -$CH(CH_3)_2$, -$CH_2CH(CH_3)_2$, -$CH(CH)CH_2CH_3$, -CH_2CH_2*CH_2, wherein the *CH_2 is bonded to the adjancent NH to form a five membered heterocycle, -CH_2-phenyl, -CH_2(phenol), -CH_2-(3-indole), -CH_2SH, -$CH_2CH_2SCH_3$, -CH_2OH, -$CH(OH)CH_3$,-CH2CH2CH2CH2NH_3^+, -$CH_2CH_2CH_2(NH)C(=NH_2^+)NH_2$, -$CH_2$-(5-(3H-imidazol-1-ium)), -CH_2COO^-, -$CH_2CH_2COO^-$, CH_2CONH_2, or -$CH_2CH_2CONH_2$;

where x is 1 or 0; and

where y is 1 or 0, or pharmaceutically acceptable salts thereof.

61. A compound according to claim 60, wherein R_1 is C_1 - C_6 alkyl.

62. A compound according to claim 61, wherein R_1 is -C_4 alkyl.

63. A compound according to claim 62, wherein R_1 is -$CH_2CH(CH_3)_2$.

64. A compound according to claim 60, wherein R_2 is -alkyl.

65. A compound according to claim 64, wherein R_2 is C_1 alkyl.

66. A compound according to claim 65, wherein R_2 is -CH_3.

67. A compound according to claim 60, wherein R_3 is -CH_3.

68. A compound according to claim 60, wherein x is 1.

69. A compound according to claim 68, wherein R_4 is $-CH_2CH_2COOH$.

70. A compound according to claim 68, wherein y is 1.

71. A compound according to claim 70, wherein R_5 is $-CH_2$-phenyl.

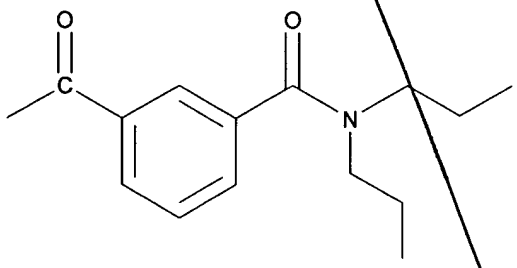
72. A compound according to claim 60, wherein X_N is -CO-.

73. A compound according to claim 72, wherein R_{N-1} is substituted or unsubstituted $R_{N\text{-}aryl}$.

74. A compound according to claim 73, wherein $R_{N\text{-}aryl}$ is substituted or unsubstituted phenyl.

75. A compound according to claim 74, wherein phenyl is substituted with $-CONPr_2$.

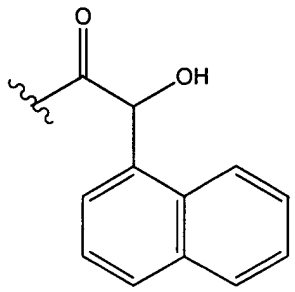
76. A compound according to claim 75, wherein R_N is



77. A compound according to claim 73, wherein $R_{N\text{-}aryl}$ is substituted 1-naphthyl.

78. A compound according to claim 77, wherein 1-naphthyl is substituted with -CHOH.

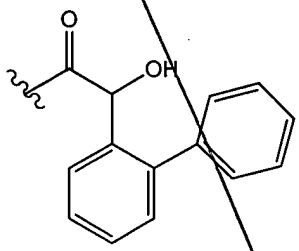
79. A compound according to claim 78, wherein R_N is:



80. A compound according to claim 73, wherein $R_{N\text{-}aryl}$ is substituted biphenyl.

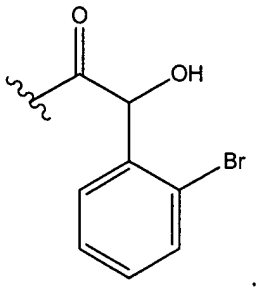
81. A compound according to claim 80, wherein biphenyl is substituted with -CHOH.

82. A compound according to claim 81, wherein R_N is:

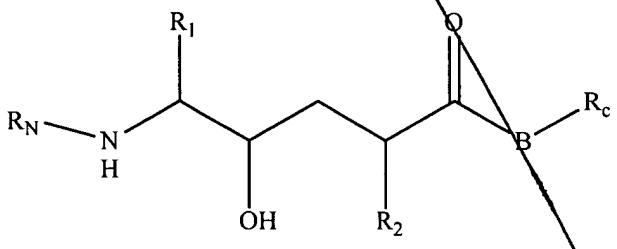


83. A compound according to claim 74, wherein phenyl is substituted with -CHOH, and -Br.

84. A compound according to claim 83, wherein R_N is:



85. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises administration of a therapeutically effective amount of a compound selected from the group consisting of a disubstituted amine of formula (XII)



(XII)

where R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -$(R_{1\text{-aryl}})$ where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) $-CF_3$,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) $-O-CF_3$,

(F) $-NH_2$,

(G) -OH, or

(H) -C≡N,

(V) -$(CH_2)_{0-6}$-alkyl -$(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) $-NH_2$,

(7) -OH, or

(8) -C≡N,

(VI) $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-$(R_{1\text{-heterocycle}})$ where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) $-CF_3$,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) $-O-CF_3$,

(7) $-NH_2$,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) alkyl, or

(III) -C_1-C_5 alkyl-$R_{2\text{-}1}$ where $R_{2\text{-}1}$ is cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_N is:

(I) $R_{N\text{-}1}$-X_N- where X_N is:

(A) –CO-,

(B) $-SO_2$-,

(C) -$(CR'R'')_{1\text{-}6}$ where R' and R" are the same or different and are –H or C_1-C_4 alkyl,

(D) –CO-$(CR'R'')_{1\text{-}6}$-$X_{N\text{-}1}$ where $X_{N\text{-}1}$ is –O-, -S- or –NR'R"- and where R' and R" are as defined above, or

(E) a single bond;

where $R_{N\text{-}1}$ is:

(A) $R_{N\text{-aryl}}$ where $R_{N\text{-aryl}}$ is phenyl, biphenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are:

(a) -H,

(b) $-C_1-C_6$ alkyl unsubstituted or substituted with

(i) -OH, or

(ii) $-NH_2$,

(c) $-C_1-C_6$ alkyl unsubstituted or substituted with –F, -Cl, -Br, or -I,

(d) $-C_3-C_7$ cycloalkyl,

(e) $-(C_1-C_2$ alkyl)-(C_3-C_7 cycloalkyl),

(f) $-(C_1-C_6$ alkyl)-O-(C_1-C_3 alkyl),

(g) $-C_1-C_6$ alkenyl with one or two double bonds,

(h) $-C_1-C_6$ alkynyl with one or two triple bonds,

(i) $-C_1-C_6$ alkyl chain with one double bond and one triple bond,

(j) $-R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, or

(k) $-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(8) $-CO-(C_3-C_{12}$ alkyl),

(9) $-CO-(C_3-C_6$ cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) $-CO-R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) $-CO-R_{N-4}$ where R_{N-4} is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with C_1-C_3 alkyl,

(13) $-CO-O-R_{N-5}$ where R_{N-5} is:

(a) alkyl, or

(b) -$(CH_2)_{0-2}$-($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is as defined above,

(14) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) -O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH,

(28) -S-(C_1-C_6 alkyl),

(29) C_1-C_6 alkyl unsubstituted or substituted with halo,

(30) –O-(C_1-C_6 alkyl unsubstituted or substituted with halo), or

(31) –O-phenyl,

(32) (C_1-C_6 alkyl) substituted with -CO-NH-C(=O)-,

(B) -$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(1) pyridinyl,

(2) pyrimidinyl,

(3) quinolinyl,

(4) indenyl,

(5) indanyl,

(6) benzothiophenyl,

(7) indolyl,

(8) indolinyl,

(9) pyridazinyl,

(10) pyrazinyl,

(11) isoindolyl,

(12) isoquinolyl,

(13) quinazolinyl,

(14) quinoxalinyl,

(15) phthalazinyl,

(16) imidazolyl,

(17) isoxazolyl,

(18) pyrazolyl,

(19) oxazolyl,

(20) thiazolyl,

(21) indolizinyl,

(22) indazolyl,

(23) benzothiazolyl,

(24) benzimidazolyl,

(25) benzofuranyl,

(26) furanyl,

(27) thienyl,

(28) pyrrolyl,

(29) oxadiazolyl,

(30) thiadiazolyl,

(31) triazolyl,

(32) tetrazolyl,

(33) 1, 4-benzodioxan

(34) purinyl,

(35) oxazolopyridinyl,

(36) imidazopyridinyl,

(37) isothiazolyl,

(38) naphthyridinyl,

(39) cinnolinyl,

(40) carbazolyl,

(41) β-carbolinyl,

(42) isochromanyl,

(43) chromanyl,

(44) furazanyl,

(45) tetrahydroisoquinoline,

(46) isoindolinyl,

(47) isobenzotetrahydrofuranyl,

(48) isobenzotetrahydrothienyl,

(49) isobenzothiophenyl,

(50) benzoxazolyl, or

(51) pyridopyridinyl,

where the $R_{N\text{-heteroaryl}}$ group is bonded by any atom of the parent $R_{N\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{N\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{N\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) -CO-$R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(13) -CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(14) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH, or

(28) -S-(C_1-C_6 alkyl),

(29) (C_1-C_6 alkyl) substituted with -CO-OH and -NH-C(=O)-,

(C) -$R_{N\text{-aryl}}$-$R_{N\text{-aryl}}$ where -$R_{N\text{-aryl}}$ is as defined above,

(D) -$R_{N\text{-aryl}}$-$R_{N\text{-heteroaryl}}$ where -$R_{N\text{-aryl}}$ and -$R_{N\text{-heteroaryl}}$ are as defined above,

(E) -$R_{N\text{-heteroaryl}}$-$R_{N\text{-aryl}}$ where -$R_{N\text{-aryl}}$ and -$R_{N\text{-heteroaryl}}$ are as defined above,

(F) -$R_{N\text{-heteroaryl}}$-$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is as defined above,

(G) -$R_{N\text{-}aryl}$-O-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(H) -$R_{N\text{-}aryl}$-S-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(I) -$R_{N\text{-}heteroaryl}$-O-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(J) -$R_{N\text{-}heteroaryl}$-S-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(K) -$R_{N\text{-}aryl}$-CO-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(L) -$R_{N\text{-}aryl}$-CO-$R_{N\text{-}heteroaryl}$ where -$R_{N\text{-}aryl}$ and $R_{N\text{-}heteroaryl}$ are as defined above,

(M) -$R_{N\text{-}aryl}$-SO_2-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(N) -$R_{N\text{-}heteroaryl}$-CO-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(O) -$R_{N\text{-}heteroaryl}$-SO_2-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(P) –$R_{N\text{-}aryl}$-O-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}aryl}$ is as defined above,

(Q) –$R_{N\text{-}aryl}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}aryl}$ is as defined above,

(R) –$R_{N\text{-}heteroaryl}$-O-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}heteroaryl}$ is as defined above, or

(S) –$R_{N\text{-}heteroaryl}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}heteroaryl}$ is as defined above, or

(II) –CO-(C_1-C_6 alkyl) where alkyl is unsubstituted or substituted with:

(A) -OH,

(B) -C_1-C_6 alkoxy,

(C) -C_1-C_6 thioalkoxy,

(D) –CO-O-$R_{N\text{-}8}$ where $R_{N\text{-}8}$ is –H, C_1-C_6 alkyl or -phenyl,

(E) –CO-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(F) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(G) -SO_2-(C_1-C_8 alkyl),

(H) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(I) -NH-CO-(C_1-C_6 alkyl),

(J) -NH-CO-O-R_{N-8} where R_{N-8} is as defined above,

(K) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(L) -R_{N-4} where R_{N-4} is as defined above,

(M) -O-CO-(C_1-C_6 alkyl),

(N) -O-CO-$NR_{N-8}R_{N-8}$ where R_{N-8} are the same or different and are as defined above, or

(O) -O-(C_1-C_5 alkyl)-COOH;

where B is -O-, -NH-, or -N(C_1-C_6 alkyl)-; and

where R_C is:

(I) C_1-C_8 alkyl unsubstituted or substituted with –OH, –O-phenyl, halo, or (C_1-C_6 alkoxy unsubstituted or substituted with halo), or

(II) -$C(R_{C-1})(R_{C-2})$-CO-NH-R_{C-3} where R_{C-1} and R_{C-2} are the same or different and are:

(A) -H,

(B) -C_1-C_6 alkyl,

(C) -(C_1-C_4 alkyl)-$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined for R_{N-aryl},

(D) -(C_1-C_4 alkyl)-$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined for $R_{N-heteroaryl}$, and $R_{N-heteroaryl}$ is as defined above,

(E) -(C_1-C_4 alkyl)-$R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined for $R_{N-heterocycle}$, and $R_{N-heterocycle}$ is as defined above,

(F) –$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,

(G) –$R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined above,

(H) –$(CH_2)_{1-4}$-OH,

(I) -$(CH_2)_{1-4}$-R_{C-4}-$(CH_2)_{1-4}$-$R_{C'-aryl}$ where R_{C-4} is –O-, -S-, -NH-, or –NR_{C-5}- where R_{C-5} is C_1-C_6 alkyl, and where $R_{C'-aryl}$ is as defined above,

(J) -$(CH_2)_{1-4}$-R_{C-4}-$(CH_2)_{1-4}$-$R_{C-heteroaryl}$ where R_{C-4} and $R_{C-heteroaryl}$ are as defined above, or

(K) $-R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

and where $R_{C\text{-}3}$ is:

(A) -H,

(B) -C_1-C_6 alkyl, substituted or unsubstituted with:

(1) -H,

(2) -C_1-C_6 alkyl,

(3) -(C_1-C_4 alkyl)-$R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined for $R_{N\text{-aryl}}$,

(4) -(C_1-C_4 alkyl)-$R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined for $R_{N\text{-heteroaryl}}$, and $R_{N\text{-heteroaryl}}$ is as defined above,

(5) -(C_1-C_4 alkyl)-$R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined for $R_{N\text{-heterocycle}}$, and $R_{N\text{-heterocycle}}$ is as defined above,

(6) $-R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(7) $-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(8) $-(CH_2)_{1\text{-}4}$-OH,

(9) -$(CH_2)_{1\text{-}4}$-$R_{C\text{-}4}$-$(CH_2)_{1\text{-}4}$-$R_{C'\text{-aryl}}$ where $R_{C\text{-}4}$ is –O-, -S-, -NH-, or

$-NR_{C\text{-}5}$- where $R_{C\text{-}5}$ is C_1-C_6 alkyl, and where $R_{C'\text{-aryl}}$ is as defined above,

(10) -$(CH_2)_{1\text{-}4}$-$R_{C\text{-}4}$-$(CH_2)_{1\text{-}4}$-$R_{C\text{-heteroaryl}}$ where $R_{C\text{-}4}$ and $R_{C\text{-heteroaryl}}$ are as defined above, or

(11) $-R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

(12) -CO-OH and -NH-C(=O)-,

(C) $-R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

(D) $-R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(E) $-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(F) -(C_1-C_4 alkyl)-$R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

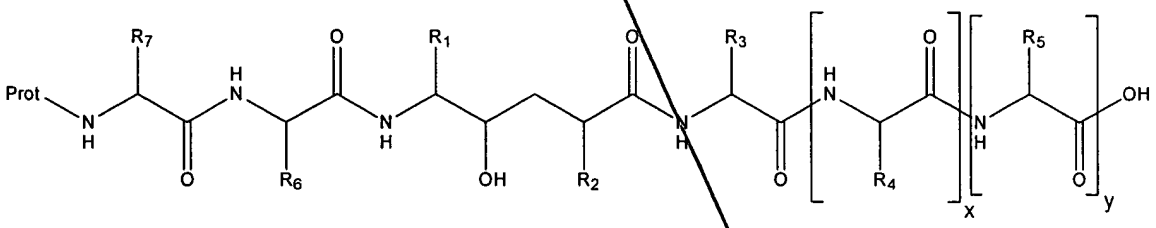
(G) -(C_1-C_4 alkyl)-$R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(H) -(C_1-C_4 alkyl)-$R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above, or

(J) $-C(R_{C-5})(R_{C-6})-CO-NH-C(R_{C-7})(R_{C-8})-COOH$, where R_{C-5}, R_{C-6}, R_{C-7}, and R_{C-8} are the same or different, and are as defined for R_{C-1} and R_{C-2} and where R_{C-1} and R_{C-2} are as defined above;

or pharmaceutically acceptable salts thereof.

86. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises administration of a therapeutically effective amount of a compound selected from the group consisting of a disubstituted amine of formula (XIII)



(XIII)

wherein R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) $-(CH_2)_{0-6}$-alkyl $-(R_{1\text{-aryl}})$ where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) $-CF_3$,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) $-O-CF_3$,

(F) $-NH_2$,

(G) -OH, or

(H) -C≡N,

(V) $-(CH_2)_{0-6}$-alkyl $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the R_1.

heteroaryl group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) $-NH_2$,

(7) -OH, or

(8) -C≡N,

(VI) $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-$(R_{1\text{-heterocycle}})$ where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) $-CF_3$,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) –O-CF_3,

(7) -NH_2,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) C_1-C_6 alkyl, or

(III) -$(CH_2)_{0\text{-}4}$-$R_{2\text{-}1}$ where $R_{2\text{-}1}$ is (C_3-C_6)cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_3, R_4, R_5, R_6, and R_7, are each independently -H, -CH_3, -$CH(CH_3)_2$, -$CH_2CH(CH_3)_2$, -$CH(CH)CH_2CH_3$, -CH_2CH_2*CH_2, wherein the *CH_2 is bonded to the adjancent NH to form a five membered heterocycle, -CH_2-phenyl, -CH_2(phenol), -CH_2-(3-indole), -CH_2SH, -$CH_2CH_2SCH_3$, -CH_2OH, -$CH(OH)CH_3$,-$CH2CH2CH2CH2NH_3^+$, -$CH_2CH_2CH_2(NH)C(=NH_2^+)NH_2$, -$CH_2$-(5-(3H-imidazol-1-ium)), -CH_2COO^-, -$CH_2CH_2COO^-$, CH_2CONH_2, or -$CH_2CH_2CONH_2$;

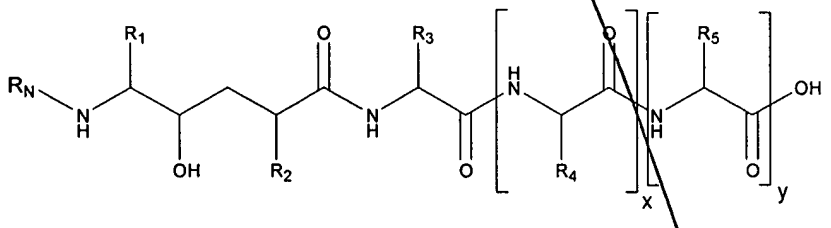
where x is 1 or 0;

where y is 1 or 0; and

where Prot is *t*-butoxycarbonyl, benzyloxycarbonyl, formyl, trityl, acetyl, trichloroacetyl, dichloroacetyl, chloroacetyl, trifluoroacetyl, difluoroacetyl, fluoroacetyl, 4-phenylbenzyloxycarbonyl, 2-methylbenzyloxycarbonyl, 4-ethoxybenzyloxycarbonyl, 4-fluorobenzyloxycarbonyl, 4-chlorobenzyloxycarbonyl, 3-chlorobenzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, 2,4-dichlorobenzyloxycarbonyl, 4-bromobenzyloxycarbonyl, 3-bromobenzyloxycarbonyl, 4-nitrobenzyloxycarbonyl, 4-cyanobenzyloxycarbonyl, 2-(4-

xenyl)isopropoxycarbonyl, 1,1-diphenyleth-1-yloxycarbonyl, 1,1-diphenylprop-1-yloxycarbonyl, 2-phenylprop-2-yloxycarbonyl, 2-(*p*-toluyl)prop-2-yloxycarbonyl, cyclopentanyloxycarbonyl, 1-methylcyclopentanyloxycarbonyl, cyclohexanyloxycarbonyl, 1-methylcyclohexanyloxycabonyl, 2-methylcyclohexanyloxycarbonyl, 2-(4-toluylsulfonyl)ethoxycarbonyl, 2-(methylsulfonyl)ethoxycarbonyl, 2-(triphenylphosphino)ethoxycarbonyl, fluorenylmethoxycarbonyl, 2-(trimethylsilyl)ethoxycarbonyl, allyloxycarbonyl, 1-(trimethylsilylmethyl)prop-1-enyloxycarbonyl, 5-benzisoxalylmethoxycarbonyl, 4-acetoxybenzyloxycarbonyl, 2,2,2-trichloroethoxycarbonyl, 2-ethynyl-2-propoxycarbonyl, cyclopropylmethoxycarbonyl, 4-(decyloxyl)benzyloxycarbonyl, isobornyloxycarbonyl and 1-piperidyloxycarbonyl, 9-fluorenylmethyl carbonate, -CH-CH=CH_2, or phenyl-C(=N-)-H, or pharmaceutically acceptable salts thereof.

87. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises administration of a therapeutically effective amount of a compound selected from the group consisting of a disubstituted amine of formula (XIV)



(XIV)

wherein R_N is:

(I) R_{N-1}-X_N- where X_N is:

(A) –CO-,

(C) -(CR'R")$_{1-6}$ where R' and R" are the same or different and are –H or C_1-C_4 alkyl,

(D) –CO-(CR'R")$_{1-6}$-X_{N-1} where X_{N-1} is –O-, -S- or –NR'R"- and where R' and R" are as defined above,

where R_{N-1} is:

(A) $R_{N\text{-}aryl}$ where $R_{N\text{-}aryl}$ is phenyl, biphenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) -CO-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are:

(a) -H,

(b) -C_1-C_6 alkyl unsubstituted or substituted with

(i) -OH, or

(ii) $-NH_2$,

(c) -C_1-C_6 alkyl unsubstituted or substituted with –F, -Cl, -Br, or -I,

(d) -C_3-C_7 cycloalkyl,

(e) -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl),

(f) -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl),

(g) -C_1-C_6 alkenyl with one or two double bonds,

(h) -C_1-C_6 alkynyl with one or two triple bonds,

(i) -C_1-C_6 alkyl chain with one double bond and one triple bond,

(j) -$R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, or

(k) -$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) -CO-$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) -CO-$R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with C_1-C_3 alkyl,

(13) -CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is:

(a) alkyl, or

(b) -$(CH_2)_{0\text{-}2}$-($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is as defined above,

(14) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH,

(28) -S-(C_1-C_6 alkyl),

(29) C_1-C_6 alkyl unsubstituted or substituted with halo,

(30) –O-(C_1-C_6 alkyl unsubstituted or substituted with halo), or

(31) –O-phenyl,

(32) (C_1-C_6 alkyl) substituted with -CO-NH-C(=O)-,

(B) -$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(1) pyridinyl,

(2) pyrimidinyl,

(3) quinolinyl,

(4) indenyl,

(5) indanyl,

(6) benzothiophenyl,

(7) indolyl,

(8) indolinyl,

(9) pyridazinyl,

(10) pyrazinyl,

(11) isoindolyl,

(12) isoquinolyl,

(13) quinazolinyl,

(14) quinoxalinyl,

(15) phthalazinyl,

(16) imidazolyl,

(17) isoxazolyl,

(18) pyrazolyl,

(19) oxazolyl,

(20) thiazolyl,

(21) indolizinyl,

(22) indazolyl,

(23) benzothiazolyl,

(24) benzimidazolyl,

(25) benzofuranyl,

(26) furanyl,

(27) thienyl,

(28) pyrrolyl,

(29) oxadiazolyl,

(30) thiadiazolyl,

(31) triazolyl,

(32) tetrazolyl,

(33) 1, 4-benzodioxan

(34) purinyl,

(35) oxazolopyridinyl,

(36) imidazopyridinyl,

(37) isothiazolyl,

(38) naphthyridinyl,

(39) cinnolinyl,

(40) carbazolyl,

(41) β-carbolinyl,

(42) isochromanyl,

(43) chromanyl,

(44) furazanyl,

(45) tetrahydroisoquinoline,

(46) isoindolinyl,

(47) isobenzotetrahydrofuranyl,

(48) isobenzotetrahydrothienyl,

(49) isobenzothiophenyl,

(50) benzoxazolyl, or

(51) pyridopyridinyl,

where the $R_{N\text{-heteroaryl}}$ group is bonded by any atom of the parent $R_{N\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{N\text{-heteroaryl}}$

group replaces the hydrogen atom and its bond, where $R_{N\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) $-CO-R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) $-CO-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(13) $-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(14) $-SO_2-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) $-SO_2$-(C_3-C_{12} alkyl),

(17) $-NH-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) $-NH-CO-N(C_1\text{-}C_3\text{ alkyl})_2$,

(19) $-N-CS-N(C_1\text{-}C_3\text{ alkyl})_2$,

(20) $-N(C_1\text{-}C_3\text{ alkyl})-CO-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) $-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) $-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH, or

(28) -S-(C_1-C_6 alkyl),

(29) (C_1-C_6 alkyl) substituted with -CO-OH and -NH-C(=O)-,

(C) -$R_{N\text{-}aryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ is as defined above,

(D) -$R_{N\text{-}aryl}$-$R_{N\text{-}heteroaryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(E) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}aryl}$ where -$R_{N\text{-}aryl}$ and -$R_{N\text{-}heteroaryl}$ are as defined above,

(F) -$R_{N\text{-}heteroaryl}$-$R_{N\text{-}heteroaryl}$ where $R_{N\text{-}heteroaryl}$ is as defined above,

(II) –CO-(C_1-C_6 alkyl) where alkyl is unsubstituted or substituted with:

(A) -OH,

(B) -C_1-C_6 alkoxy,

(C) -C_1-C_6 thioalkoxy,

(D) –CO-O-$R_{N\text{-}8}$ where $R_{N\text{-}8}$ is –H, C_1-C_6 alkyl or -phenyl,

(E) –CO-N$R_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(F) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(G) -SO_2-(C_1-C_8 alkyl),

(H) -SO_2-N$R_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(I) -NH-CO-(C_1-C_6 alkyl),

(J) -NH-CO-O-$R_{N\text{-}8}$ where $R_{N\text{-}8}$ is as defined above,

(K) -N$R_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(L) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(M) -O-CO-(C_1-C_6 alkyl),

(N) -O-CO-$NR_{N-8}R_{N-8}$ where R_{N-8} are the same or different and are as defined above, or

(O) -O-(C_1-C_5 alkyl)-COOH;

wherein R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) $-CF_3$,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) $-O-CF_3$,

(F) $-NH_2$,

(G) -OH, or

(H) -C≡N,

(V) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, -Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) $-NH_2$,

(7) -OH, or

(8) -C≡N,

(VI) $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-$(R_{1\text{-heterocycle}})$ where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) $-CF_3$,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) $-O-CF_3$,

(7) $-NH_2$,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) C_1-C_6 alkyl, or

(III) $-(CH_2)_{0\text{-}4}-R_{2\text{-}1}$ where $R_{2\text{-}1}$ is (C_3-C_6)cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_3, R_4, and R_5, are each independently -H, $-CH_3$, $-CH(CH_3)_2$, $-CH_2CH(CH_3)_2$, $-CH(CH)CH_2CH_3$, $-CH_2CH_2{*}CH_2$, wherein the $*CH_2$ is bonded to the adjancent NH to form a five membered heterocycle, $-CH_2$-phenyl, $-CH_2$(phenol), $-CH_2$-(3-indole), $-CH_2SH$, $-CH_2CH_2SCH_3$, $-CH_2OH$, $-CH(OH)CH_3$,-CH2CH2CH2CH2NH_3^+, $-CH_2CH_2CH_2(NH)C(=NH_2^+)NH_2$, $-CH_2$-(5-(3H-imidazol-1-ium)), $-CH_2COO^-$, $-CH_2CH_2COO^-$, CH_2CONH_2, or $-CH_2CH_2CONH_2$;

where x is 1 or 0; and

where y is 1 or 0, or pharmaceutically acceptable salts thereof.

88. A method of treatment according to claim 85, wherein the disease is Alzheimer's disease.

89. A method of treatment according to claim 85, wherein the method is helping prevent or delay the onset of Alzheimer's disease.

90. A method of treatment according to claim 85, wherein the disease is mild cognitive impairment.

91. A method of treatment according to claim 85, wherein the disease is Down's syndrome.

92. A method of treatment according to claim 85, wherein the disease is Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type.

93. A method of treatment according to claim 85, wherein the disease is cerebral amyloid angiopathy.

94. A method of treatment according to claim 85, wherein the disease is degenerative dementias.

95. A method of treatment according to claim 85, wherein the disease is diffuse Lewy body type of Alzheimer's disease.

96. A method of treatment according to claim 85, wherein the method is treating an existing disease.

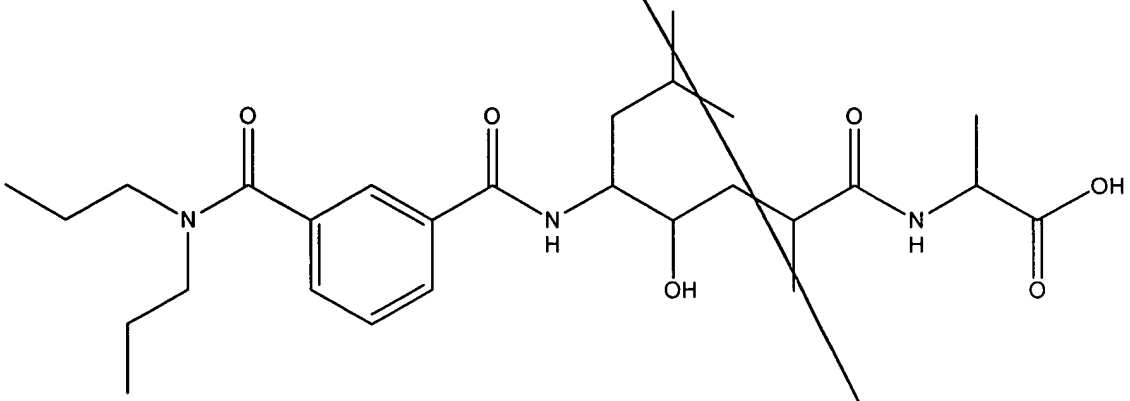
97. A method of treatment according to claim 85, wherein the method is preventing a disease from developing.

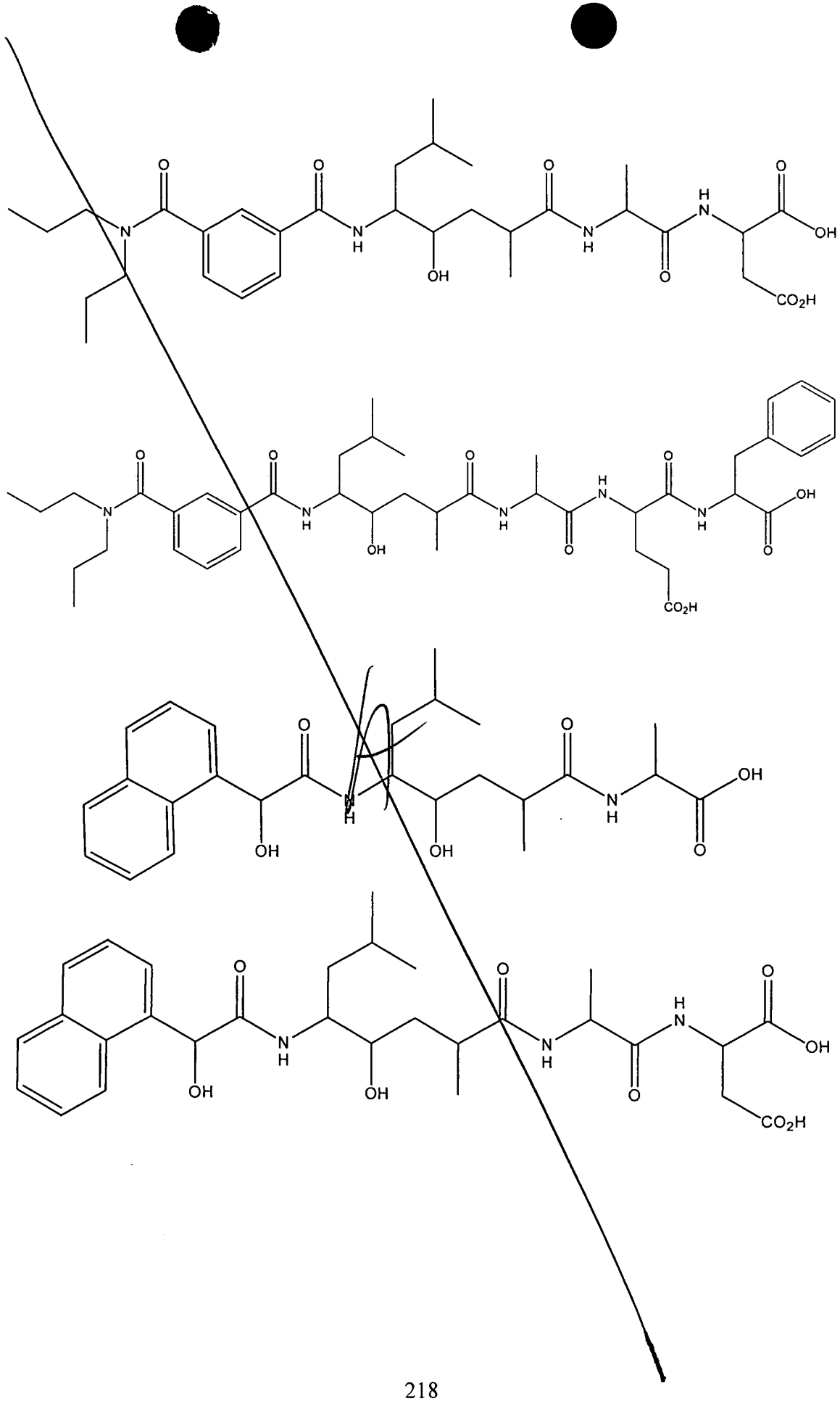
98. A method of treatment according to claim 85, wherein the therapeutically effective amount for oral administration is from about 0.1 mg/day to about 1,000 mg/day; for parenteral, sublingual, intranasal, intrathecal administration is from about 0.5 to about 100 mg/day; for depo administration and implants is from about 0.5 mg/day to about 50 mg/day; for topical administration is from about 0.5 mg/day to about 200 mg/day; for rectal administration is from about 0.5 mg to about 500 mg.

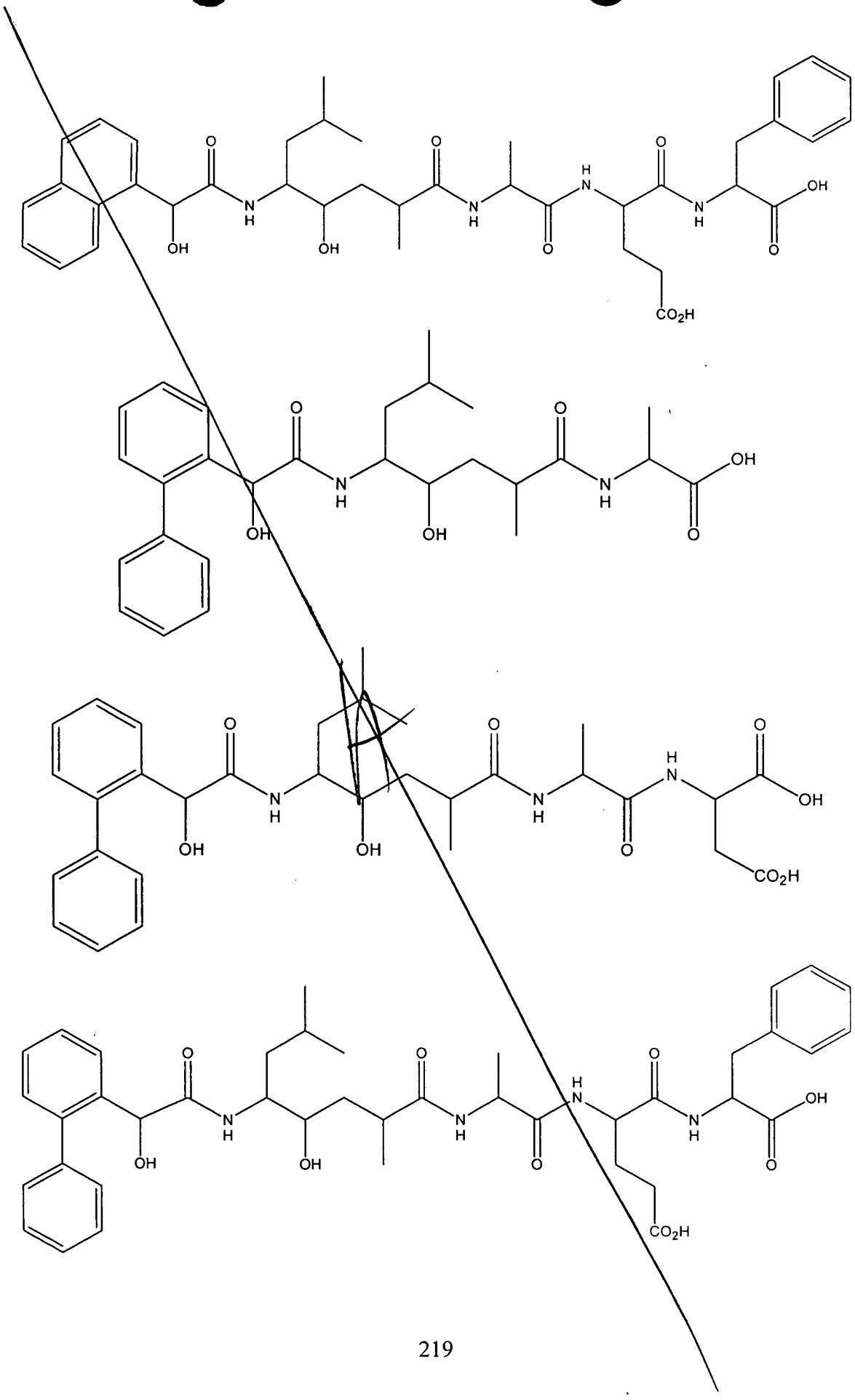
99. A method of treatment according to claim 85, wherein the therapeutically effective amount for oral administration is from about 1 mg/day to about 100 mg/day and for parenteral administration is from about 5 to about 50 mg daily.

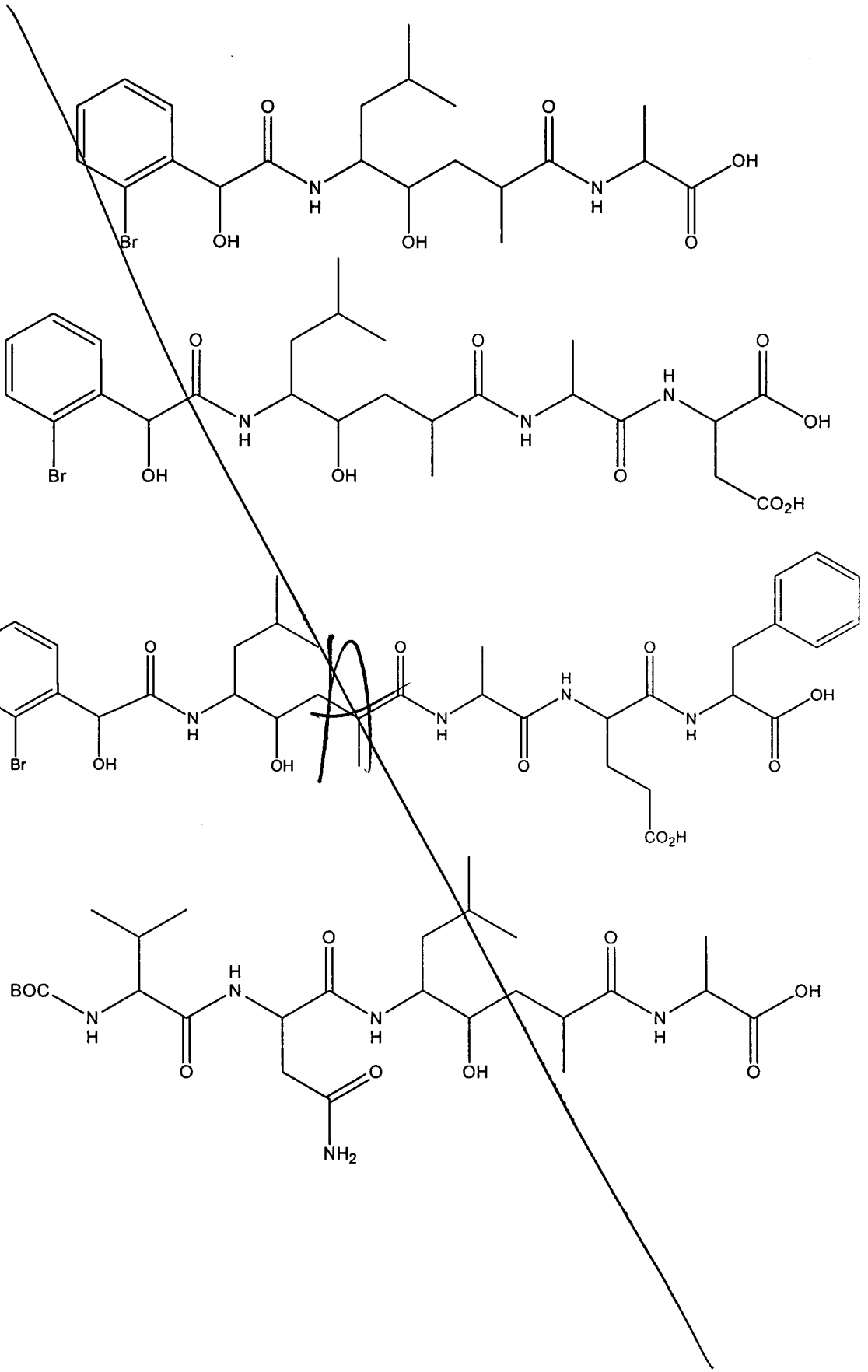
100. A method of treatment according to claim 85, where the therapeutically effective amount for oral administration is from about 5 mg/day to about 50 mg/day.

101. A method of treatment according to claim 85, 86, or 87, wherein the compound is:








Br
OH
OH
O
N
H
OH
Br
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N
H
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CO2H
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H
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CO2H
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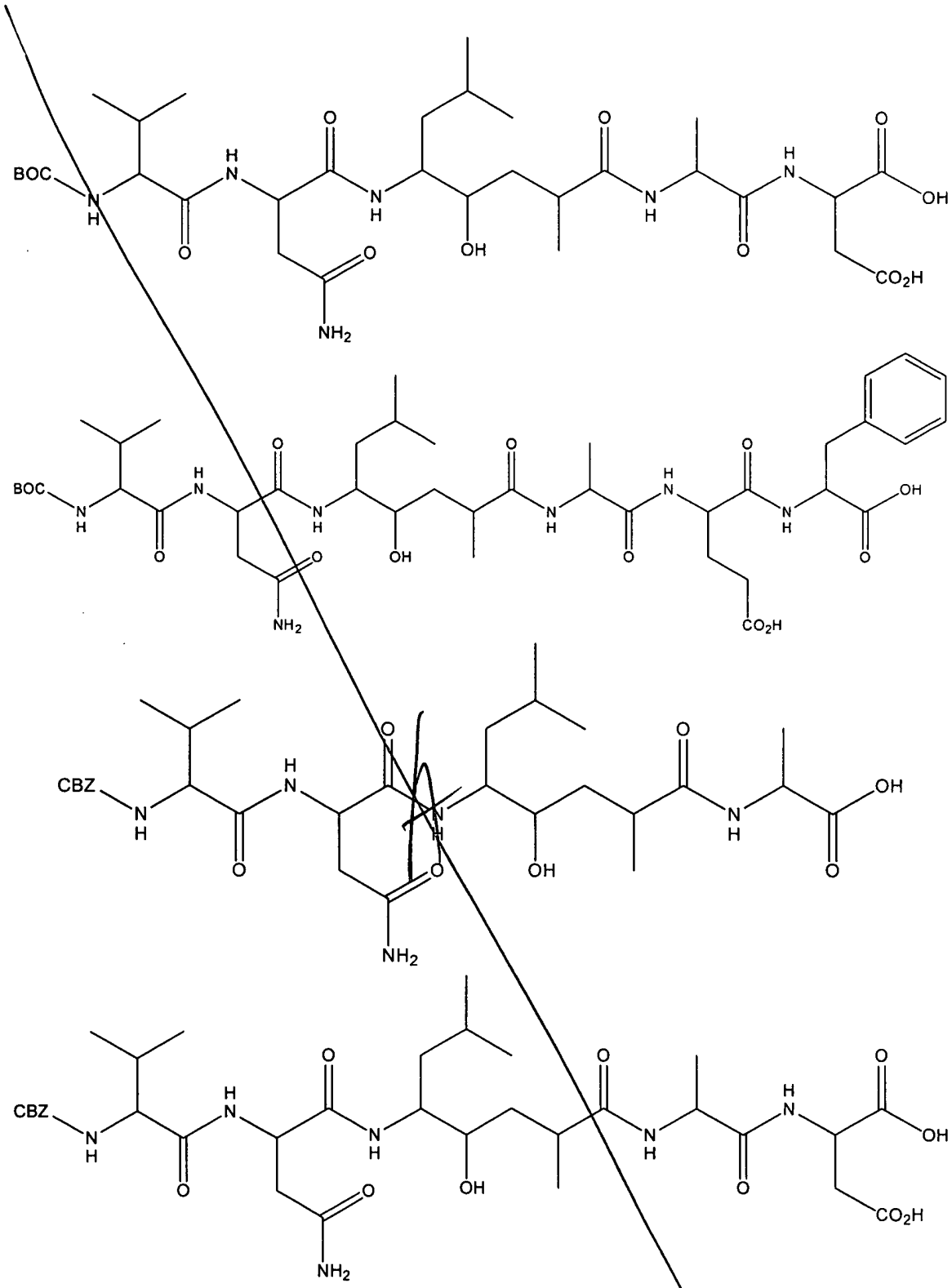
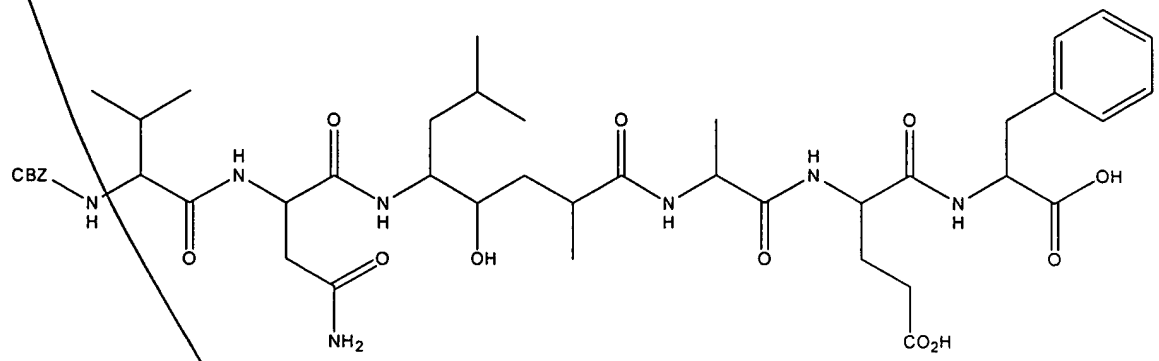


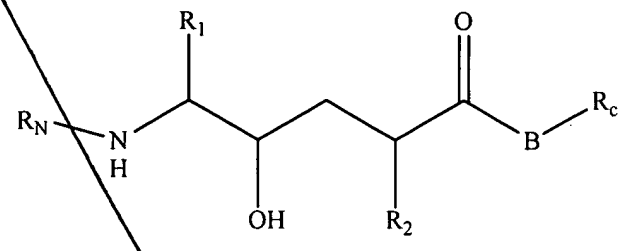
, or



102. A method of treatment according to claim 85, where the pharmaceutically acceptable salt is selected from the group consisting of salts of the following acids: acetic, aspartic, benzenesulfonic, benzoic, bicarbonic, bisulfuric, bitartaric, butyric, calcium edetate, camsylic, carbonic, chlorobenzoic, citric, edetic, edisylic, estolic, esyl, esylic, formic, fumaric, gluceptic, gluconic, glutamic, glycollylarsanilic, hexamic, hexylresorcinoic, hydrabamic, hydrobromic, hydrochloric, hydroiodic, hydroxynaphthoic, isethionic, lactic, lactobionic, maleic, malic, malonic, mandelic, methanesulfonic, methylnitric, methylsulfuric, mucic, muconic, napsylic, nitric, oxalic, p-nitromethanesulfonic, pamoic, pantothenic, phosphoric, monohydrogen phosphoric, dihydrogen phosphoric, phthalic, polygalacturonic, propionic, salicylic, stearic, succinic, succinic, sulfamic, sulfanilic, sulfonic, sulfuric, tannic, tartaric, teoclic and toluenesulfonic.

103. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative

dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises administration of a therapeutically effective amount of a compound selected from the group consisting of a disubstituted amine of formula (XII)



(XII)

where R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) –CF_3,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) –O-CF_3,

(F) -NH_2,

(G) -OH, or

(H) -C≡N,

(V) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) $-NH_2$,

(7) -OH, or

(8) -C≡N,

(VI) $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-$(R_{1\text{-heterocycle}})$ where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) $-CF_3$,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) $-O-CF_3$,

(7) $-NH_2$,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) alkyl, or

(III) -C_1-C_5 alkyl-$R_{2\text{-}1}$ where $R_{2\text{-}1}$ is cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_N is:

(I) $R_{N\text{-}1}$-X_N- where X_N is:

(A) –CO-,

(B) –SO_2-,

(C) -(CR'R")$_{1\text{-}6}$ where R' and R" are the same or different and are –H or C_1-C_4 alkyl,

(D) –CO-(CR'R")$_{1\text{-}6}$-$X_{N\text{-}1}$ where $X_{N\text{-}1}$ is –O-, -S- or –NR'R"- and where R' and R" are as defined above, or

(E) a single bond;

where $R_{N\text{-}1}$ is:

(A) $R_{N\text{-aryl}}$ where $R_{N\text{-aryl}}$ is phenyl, biphenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) -NO_2,

(5) -CO-OH,

(6) -C≡N,

(7) -CO-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are:

(a) -H,

(b) -C_1-C_6 alkyl unsubstituted or substituted with

(i) -OH, or

(ii) -NH_2,

(c) -C_1-C_6 alkyl unsubstituted or substituted with –F, -Cl, -Br, or -I,

(d) -C_3-C_7 cycloalkyl,

(e) -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl),

(f) -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl),

(g) -C_1-C_6 alkenyl with one or two double bonds,

(h) -C_1-C_6 alkynyl with one or two triple bonds,

(i) -C_1-C_6 alkyl chain with one double bond and one triple bond,

(j) -$R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, or

(k) -$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) -CO-$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) -CO-$R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with C_1-C_3 alkyl,

(13) -CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is:

(a) alkyl, or

(b) -$(CH_2)_{0\text{-}2}$-($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is as defined above,

(14) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-$R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ can be the same or different and are as defined above,

(22) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH,

(28) -S-(C_1-C_6 alkyl),

(29) C_1-C_6 alkyl unsubstituted or substituted with halo,

(30) –O-(C_1-C_6 alkyl unsubstituted or substituted with halo), or

(31) –O-phenyl,

(32) (C_1-C_6 alkyl) substituted with -CO-NH-C(=O)-,

(B) -$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(1) pyridinyl,

(2) pyrimidinyl,

(3) quinolinyl,

(4) indenyl,

(5) indanyl,

(6) benzothiophenyl,

(7) indolyl,

(8) indolinyl,

(9) pyridazinyl,

(10) pyrazinyl,

(11) isoindolyl,

(12) isoquinolyl,

(13) quinazolinyl,

(14) quinoxalinyl,

(15) phthalazinyl,

(16) imidazolyl,

(17) isoxazolyl,

(18) pyrazolyl,

(19) oxazolyl,

(20) thiazolyl,

(21) indolizinyl,

(22) indazolyl,

(23) benzothiazolyl,

(24) benzimidazolyl,

(25) benzofuranyl,

(26) furanyl,

(27) thienyl,

(28) pyrrolyl,

(29) oxadiazolyl,

(30) thiadiazolyl,

(31) triazolyl,

(32) tetrazolyl,

(33) 1, 4-benzodioxan

(34) purinyl,

(35) oxazolopyridinyl,

(36) imidazopyridinyl,

(37) isothiazolyl,

(38) naphthyridinyl,

(39) cinnolinyl,

(40) carbazolyl,

(41) β-carbolinyl,

(42) isochromanyl,

(43) chromanyl,

(44) furazanyl,

(45) tetrahydroisoquinoline,

(46) isoindolinyl,

(47) isobenzotetrahydrofuranyl,

(48) isobenzotetrahydrothienyl,

(49) isobenzothiophenyl,

(50) benzoxazolyl, or

(51) pyridopyridinyl,

where the $R_{N\text{-heteroaryl}}$ group is bonded by any atom of the parent $R_{N\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{N\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{N\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) $-CO-R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) $-CO-R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(13) $-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(14) $-SO_2-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) $-SO_2$-(C_3-C_{12} alkyl),

(17) $-NH-CO-O-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(18) $-NH-CO-N(C_1\text{-}C_3\text{ alkyl})_2$,

(19) $-N-CS-N(C_1\text{-}C_3\text{ alkyl})_2$,

(20) $-N(C_1\text{-}C_3\text{ alkyl})-CO-R_{N\text{-}5}$ where $R_{N\text{-}5}$ is as defined above,

(21) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above,

(22) -R_{N-4} where R_{N-4} is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH, or

(28) -S-(C_1-C_6 alkyl),

(29) (C_1-C_6 alkyl) substituted with -CO-OH and -NH-C(=O)-,

(C) -R_{N-aryl}-R_{N-aryl} where -R_{N-aryl} is as defined above,

(D) -R_{N-aryl}-$R_{N-heteroaryl}$ where -R_{N-aryl} and -$R_{N-heteroaryl}$ are as defined above,

(E) -$R_{N-heteroaryl}$-R_{N-aryl} where -R_{N-aryl} and -$R_{N-heteroaryl}$ are as defined above,

(F) -$R_{N-heteroaryl}$-$R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,

(G) -R_{N-aryl}-O-R_{N-aryl} where -R_{N-aryl} is as defined above,

(H) -R_{N-aryl}-S-R_{N-aryl} where -R_{N-aryl} is as defined above,

(I) -$R_{N-heteroaryl}$-O-$R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,

(J) -$R_{N-heteroaryl}$-S-$R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,

(K) -R_{N-aryl}-CO-R_{N-aryl} where -R_{N-aryl} is as defined above,

(L) -R_{N-aryl}-CO-$R_{N-heteroaryl}$ where -R_{N-aryl} and $R_{N-heteroaryl}$ are as defined above,

(M) -R_{N-aryl}-SO_2-R_{N-aryl} where -R_{N-aryl} is as defined above,

(N) -$R_{N-heteroaryl}$-CO-$R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,

(O) -$R_{N-heteroaryl}$-SO_2-$R_{N-heteroaryl}$ where $R_{N-heteroaryl}$ is as defined above,

(P) –R_{N-aryl}-O-(C_1-C_8 alkyl)-phenyl, where R_{N-aryl} is as defined above,

(Q) $-R_{N\text{-}aryl}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}aryl}$ is as defined above,

(R) $-R_{N\text{-}heteroaryl}$-O-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}heteroaryl}$ is as defined above, or

(S) $-R_{N\text{-}heteroaryl}$-S-(C_1-C_8 alkyl)-phenyl, where $R_{N\text{-}heteroaryl}$ is as defined above, or

(II) –CO-(C_1-C_6 alkyl) where alkyl is unsubstituted or substituted with:

(A) -OH,

(B) -C_1-C_6 alkoxy,

(C) -C_1-C_6 thioalkoxy,

(D) –CO-O-$R_{N\text{-}8}$ where $R_{N\text{-}8}$ is –H, C_1-C_6 alkyl or -phenyl,

(E) –CO-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(F) -CO-$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(G) -SO_2-(C_1-C_8 alkyl),

(H) -SO_2-$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(I) -NH-CO-(C_1-C_6 alkyl),

(J) -NH-CO-O-$R_{N\text{-}8}$ where $R_{N\text{-}8}$ is as defined above,

(K) -$NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are the same or different and are as defined above,

(L) -$R_{N\text{-}4}$ where $R_{N\text{-}4}$ is as defined above,

(M) -O-CO-(C_1-C_6 alkyl),

(N) -O-CO-$NR_{N\text{-}8}R_{N\text{-}8}$ where $R_{N\text{-}8}$ are the same or different and are as defined above, or

(O) -O-(C_1-C_5 alkyl)-COOH;

where B is -O-, -NH-, or -N(C_1-C_6 alkyl)-; and

where R_C is:

(I) C_1-C_8 alkyl unsubstituted or substituted with –OH, –O-phenyl, halo, or (C_1-C_6 alkoxy unsubstituted or substituted with halo), or

(II) -$C(R_{C-1})(R_{C-2})$-CO-NH-R_{C-3} where R_{C-1} and R_{C-2} are the same or different and are:

(A) -H,

(B) -C_1-C_6 alkyl,

(C) -(C_1-C_4 alkyl)-$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined for R_{N-aryl},

(D) -(C_1-C_4 alkyl)-$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined for $R_{N-heteroaryl}$, and $R_{N-heteroaryl}$ is as defined above,

(E) -(C_1-C_4 alkyl)-$R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined for $R_{N-heterocycle}$, and $R_{N-heterocycle}$ is as defined above,

(F) –$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,

(G) –$R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined above,

(H) –$(CH_2)_{1-4}$-OH,

(I) -$(CH_2)_{1-4}$-R_{C-4}-$(CH_2)_{1-4}$-$R_{C'-aryl}$ where R_{C-4} is –O-, -S-, -NH-, or –NR_{C-5}- where R_{C-5} is C_1-C_6 alkyl, and where $R_{C'-aryl}$ is as defined above,

(J) -$(CH_2)_{1-4}$-R_{C-4}-$(CH_2)_{1-4}$-$R_{C-heteroaryl}$ where R_{C-4} and $R_{C-heteroaryl}$ are as defined above, or

(K) –$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined above,

and where R_{C-3} is:

(A) -H,

(B) -C_1-C_6 alkyl, substituted or unsubstituted with:

(1) -H,

(2) -C_1-C_6 alkyl,

(3) -(C_1-C_4 alkyl)-$R_{C'-aryl}$ where $R_{C'-aryl}$ is as defined for R_{N-aryl},

(4) -(C_1-C_4 alkyl)-$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined for $R_{N-heteroaryl}$, and $R_{N-heteroaryl}$ is as defined above,

(5) -(C_1-C_4 alkyl)-$R_{C-heterocycle}$ where $R_{C-heterocycle}$ is as defined for $R_{N-heterocycle}$, and $R_{N-heterocycle}$ is as defined above,

(6) –$R_{C-heteroaryl}$ where $R_{C-heteroaryl}$ is as defined above,

(7) $-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(8) $-(CH_2)_{1\text{-}4}\text{-OH}$,

(9) $\text{-}(CH_2)_{1\text{-}4}\text{-}R_{C\text{-}4}\text{-}(CH_2)_{1\text{-}4}\text{-}R_{C'\text{-aryl}}$ where $R_{C\text{-}4}$ is –O-, -S-, -NH-, or

$-NR_{C\text{-}5}$- where $R_{C\text{-}5}$ is C_1-C_6 alkyl, and where $R_{C'\text{-aryl}}$ is as defined above,

(10) $\text{-}(CH_2)_{1\text{-}4}\text{-}R_{C\text{-}4}\text{-}(CH_2)_{1\text{-}4}\text{-}R_{C\text{-heteroaryl}}$ where $R_{C\text{-}4}$ and $R_{C\text{-heteroaryl}}$ are as defined above, or

(11) $-R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

(12) -CO-OH and -NH-C (=O)-,

(C) $-R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

(D) $-R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

(E) $-R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above,

(F) $\text{-}(C_1\text{-}C_4\text{ alkyl})\text{-}R_{C'\text{-aryl}}$ where $R_{C'\text{-aryl}}$ is as defined above,

(G) $\text{-}(C_1\text{-}C_4\text{ alkyl})\text{-}R_{C\text{-heteroaryl}}$ where $R_{C\text{-heteroaryl}}$ is as defined above,

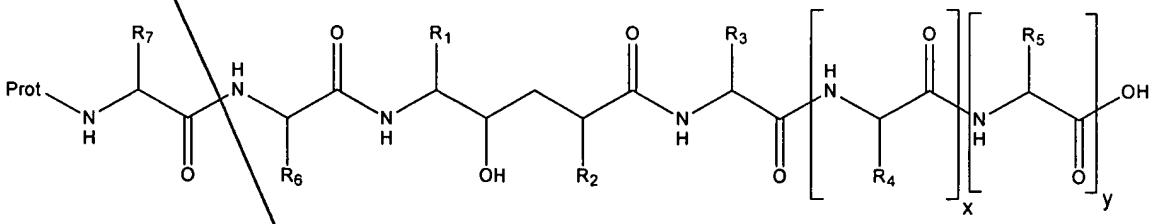
(H) $\text{-}(C_1\text{-}C_4\text{ alkyl})\text{-}R_{C\text{-heterocycle}}$ where $R_{C\text{-heterocycle}}$ is as defined above, or

(J) $\text{-}C(R_{C\text{-}5})(R_{C\text{-}6})\text{-CO-NH-}C(R_{C\text{-}7})(R_{C\text{-}8})\text{-COOH}$, where $R_{C\text{-}5}$, $R_{C\text{-}6}$, $R_{C\text{-}7}$, and $R_{C\text{-}8}$ are the same or different, and are as defined for $R_{C\text{-}1}$ and $R_{C\text{-}2}$ and where $R_{C\text{-}1}$ and $R_{C\text{-}2}$ are as defined above;

or pharmaceutically acceptable salts thereof.

104. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear

palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises administration of a therapeutically effective amount of a compound selected from the group consisting of a disubstituted amine of formula (XIII)



(XIII)

wherein R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) –CF_3,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) –O-CF_3,

(F) -NH_2,

(G) -OH, or

(H) -C≡N,

(V) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) $-O-CF_3$,

(6) $-NH_2$,

(7) -OH, or

(8) -C≡N,

(VI) -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-($R_{1\text{-heterocycle}}$) where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) $-CF_3$,

(4) -F, -Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) –O-CF_3,

(7) $-NH_2$,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) C_1-C_6 alkyl, or

(III) $-(CH_2)_{0\text{-}4}$-$R_{2\text{-}1}$ where $R_{2\text{-}1}$ is (C_3-C_6)cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_3, R_4, R_5, R_6, and R_7, are each independently -H, $-CH_3$, $-CH(CH_3)_2$, $-CH_2CH(CH_3)_2$, $-CH(CH)CH_2CH_3$, $-CH_2CH_2{*}CH_2$, wherein the $*CH_2$ is bonded to the

adjancent NH to form a five membered heterocycle, -CH_2-phenyl, -CH_2(phenol), -CH_2-(3-indole), -CH_2SH, -$CH_2CH_2SCH_3$, -CH_2OH, -CH(OH)CH_3,-CH2CH2CH2CH2NH_3^+, -$CH_2CH_2CH_2$(NH)C(=NH_2^+)NH_2, -CH_2-(5-(3H-imidazol-1-ium)), -CH_2COO^-, -$CH_2CH_2COO^-$, CH_2CONH_2, or -$CH_2CH_2CONH_2$;

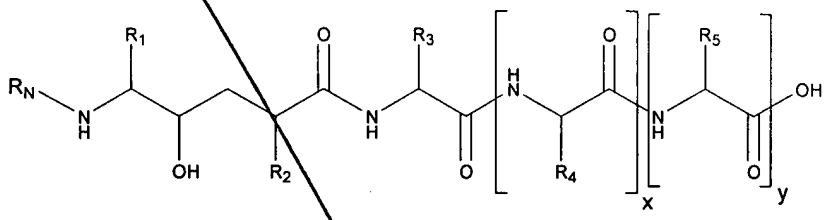
where x is 1 or 0;

where y is 1 or 0; and

where Prot is *t*-butoxycarbonyl, benzyloxycarbonyl, formyl, trityl, acetyl, trichloroacetyl, dichloroacetyl, chloroacetyl, trifluoroacetyl, difluoroacetyl, fluoroacetyl, 4-phenylbenzyloxycarbonyl, 2-methylbenzyloxycarbonyl, 4-ethoxybenzyloxycarbonyl, 4-fluorobenzyloxycarbonyl, 4-chlorobenzyloxycarbonyl, 3-chlorobenzyloxycarbonyl, 2-chlorobenzyloxycarbonyl, 2,4-dichlorobenzyloxycarbonyl, 4-bromobenzyloxycarbonyl, 3-bromobenzyloxycarbonyl, 4-nitrobenzyloxycarbonyl, 4-cyanobenzyloxycarbonyl, 2-(4-xenyl)isopropoxycarbonyl, 1,1-diphenyleth-1-yloxycarbonyl, 1,1-diphenylprop-1-yloxycarbonyl, 2-phenylprop-2-yloxycarbonyl, 2-(*p*-toluyl)prop-2-yloxycarbonyl, cyclopentanyloxycarbonyl, 1-methylcyclopentanyloxycarbonyl, cyclohexanyloxycarbonyl, 1-methylcyclohexanyloxycabonyl, 2-methylcyclohexanyloxycarbonyl, 2-(4-toluylsulfonyl)ethoxycarbonyl, 2-(methylsulfonyl)ethoxycarbonyl, 2-(triphenylphosphino)ethoxycarbonyl, fluorenylmethoxycarbonyl, 2-(trimethylsilyl)ethoxycarbonyl, allyloxycarbonyl, 1-(trimethylsilylmethyl)prop-1-enyloxycarbonyl, 5-benzisoxalylmethoxycarbonyl, 4-acetoxybenzyloxycarbonyl, 2,2,2-trichloroethoxycarbonyl, 2-ethynyl-2-propoxycarbonyl, cyclopropylmethoxycarbonyl, 4-(decyloxyl)benzyloxycarbonyl, isobornyloxycarbonyl and 1-piperidyloxycarbonyl, 9-fluorenylmethyl carbonate, -CH-CH=CH_2, or phenyl-C(=N-)-H, or pharmaceutically acceptable salts thereof.

105. A method of treating a patient who has, or in preventing a patient from getting, a disease or condition selected from the group consisting of Alzheimer's disease, for helping prevent or delay the onset of Alzheimer's disease, for treating patients with

mild cognitive impairment (MCI) and preventing or delaying the onset of Alzheimer's disease in those who would progress from MCI to AD, for treating Down's syndrome, for treating humans who have Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type, for treating cerebral amyloid angiopathy and preventing its potential consequences, i.e. single and recurrent lobar hemorrhages, for treating other degenerative dementias, including dementias of mixed vascular and degenerative origin, dementia associated with Parkinson's disease, dementia associated with progressive supranuclear palsy, dementia associated with cortical basal degeneration, diffuse Lewy body type of Alzheimer's disease and who is in need of such treatment which comprises administration of a therapeutically effective amount of a compound selected from the group consisting of a disubstituted amine of formula (XIV)



(XIV)

wherein R_N is:

(I) R_{N-1}-X_N- where X_N is:

(A) –CO-,

(C) -(CR'R")$_{1-6}$ where R' and R" are the same or different and are –H or C_1-C_4 alkyl,

(D) –CO-(CR'R")$_{1-6}$-X_{N-1} where X_{N-1} is –O-, -S- or –NR'R"- and where R' and R" are as defined above,

where R_{N-1} is:

(A) $R_{N\text{-}aryl}$ where $R_{N\text{-}aryl}$ is phenyl, biphenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) -NO_2,

(5) -CO-OH,

(6) -C≡N,

(7) -CO-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are:

(a) -H,

(b) -C_1-C_6 alkyl unsubstituted or substituted with

(i) -OH, or

(ii) $-NH_2$,

(c) -C_1-C_6 alkyl unsubstituted or substituted with –F, -Cl, -Br, or -I,

(d) -C_3-C_7 cycloalkyl,

(e) -(C_1-C_2 alkyl)-(C_3-C_7 cycloalkyl),

(f) -(C_1-C_6 alkyl)-O-(C_1-C_3 alkyl),

(g) -C_1-C_6 alkenyl with one or two double bonds,

(h) -C_1-C_6 alkynyl with one or two triple bonds,

(i) -C_1-C_6 alkyl chain with one double bond and one triple bond,

(j) -$R_{1\text{-aryl}}$ where $R_{1\text{-aryl}}$ is as defined above, or

(k) -$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) -CO-$R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) -CO-$R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-R_{N-4} where R_{N-4} is morpholinyl, thiomorpholinyl, piperazinyl, piperidinyl or pyrrolidinyl where each group is unsubstituted or substituted with C_1-C_3 alkyl,

(13) -CO-O-R_{N-5} where R_{N-5} is:

(a) alkyl, or

(b) -$(CH_2)_{0-2}$-($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is as defined above,

(14) -SO_2-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-R_{N-5} where R_{N-5} is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-R_{N-5} where R_{N-5} is as defined above,

(21) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above,

(22) -R_{N-4} where R_{N-4} is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH,

(28) -S-(C_1-C_6 alkyl),

(29) C_1-C_6 alkyl unsubstituted or substituted with halo,

(30) –O-(C_1-C_6 alkyl unsubstituted or substituted with halo), or

(31) –O-phenyl,

(32) (C_1-C_6 alkyl) substituted with -CO-NH-C(=O)-,

(B) -$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is:

(1) pyridinyl,

(2) pyrimidinyl,

(3) quinolinyl,

(4) indenyl,

(5) indanyl,

(6) benzothiophenyl,

(7) indolyl,

(8) indolinyl,
(9) pyridazinyl,
(10) pyrazinyl,
(11) isoindolyl,
(12) isoquinolyl,
(13) quinazolinyl,
(14) quinoxalinyl,
(15) phthalazinyl,
(16) imidazolyl,
(17) isoxazolyl,
(18) pyrazolyl,
(19) oxazolyl,
(20) thiazolyl,
(21) indolizinyl,
(22) indazolyl,
(23) benzothiazolyl,
(24) benzimidazolyl,
(25) benzofuranyl,
(26) furanyl,
(27) thienyl,
(28) pyrrolyl,
(29) oxadiazolyl,
(30) thiadiazolyl,
(31) triazolyl,
(32) tetrazolyl,
(33) 1, 4-benzodioxan
(34) purinyl,
(35) oxazolopyridinyl,
(36) imidazopyridinyl,
(37) isothiazolyl,
(38) naphthyridinyl,

(39) cinnolinyl,

(40) carbazolyl,

(41) β-carbolinyl,

(42) isochromanyl,

(43) chromanyl,

(44) furazanyl,

(45) tetrahydroisoquinoline,

(46) isoindolinyl,

(47) isobenzotetrahydrofuranyl,

(48) isobenzotetrahydrothienyl,

(49) isobenzothiophenyl,

(50) benzoxazolyl, or

(51) pyridopyridinyl,

where the $R_{N\text{-heteroaryl}}$ group is bonded by any atom of the parent $R_{N\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{N\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{N\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_6 alkyl,

(2) –F, -Cl, -Br, or -I,

(3) -OH,

(4) $-NO_2$,

(5) -CO-OH,

(6) -C≡N,

(7) $-CO-NR_{N\text{-}2}R_{N\text{-}3}$ where $R_{N\text{-}2}$ and $R_{N\text{-}3}$ are as defined above,

(8) -CO-(C_3-C_{12} alkyl),

(9) -CO-(C_3-C_6 cycloalkyl),

(10) $-CO-R_{1\text{-heteroaryl}}$ where $R_{1\text{-heteroaryl}}$ is as defined above,

(11) $-CO-R_{1\text{-heterocycle}}$ where $R_{1\text{-heterocycle}}$ is as defined above,

(12) -CO-R_{N-4} where R_{N-4} is as defined above,

(13) -CO-O-R_{N-5} where R_{N-5} is as defined above,

(14) -SO_2-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are as defined above,

(15) -SO-(C_1-C_8 alkyl),

(16) -SO_2-(C_3-C_{12} alkyl),

(17) -NH-CO-O-R_{N-5} where R_{N-5} is as defined above,

(18) -NH-CO-N(C_1-C_3 alkyl)$_2$,

(19) -N-CS-N(C_1-C_3 alkyl)$_2$,

(20) –N(C_1-C_3 alkyl)-CO-R_{N-5} where R_{N-5} is as defined above,

(21) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} can be the same or different and are as defined above,

(22) -R_{N-4} where R_{N-4} is as defined above,

(23) –O-CO-(C_1-C_6 alkyl),

(24) -O-CO-N(C_1-C_3 alkyl)$_2$,

(25) -O-CS-N(C_1-C_3 alkyl)$_2$,

(26) -O-(C_1-C_6 alkyl),

(27) -O-(C_2-C_5 alkyl)-COOH, or

(28) -S-(C_1-C_6 alkyl),

(29) (C_1-C_6 alkyl) substituted with -CO-OH and -NH-C(=O)-,

(C) -$R_{N\text{-aryl}}$-$R_{N\text{-aryl}}$ where -$R_{N\text{-aryl}}$ is as defined above,

(D) -$R_{N\text{-aryl}}$-$R_{N\text{-heteroaryl}}$ where -$R_{N\text{-aryl}}$ and -$R_{N\text{-heteroaryl}}$ are as defined above,

(E) -$R_{N\text{-heteroaryl}}$-$R_{N\text{-aryl}}$ where -$R_{N\text{-aryl}}$ and -$R_{N\text{-heteroaryl}}$ are as defined above,

(F) -$R_{N\text{-heteroaryl}}$-$R_{N\text{-heteroaryl}}$ where $R_{N\text{-heteroaryl}}$ is as defined above,

(II) –CO-(C_1-C_6 alkyl) where alkyl is unsubstituted or substituted with:

(A) -OH,

(B) -C_1-C_6 alkoxy,

(C) -C_1-C_6 thioalkoxy,

(D) –CO-O-R_{N-8} where R_{N-8} is –H, C_1-C_6 alkyl or -phenyl,

(E) –CO-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(F) -CO-R_{N-4} where R_{N-4} is as defined above,

(G) -SO_2-(C_1-C_8 alkyl),

(H) -SO_2-$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(I) -NH-CO-(C_1-C_6 alkyl),

(J) -NH-CO-O-R_{N-8} where R_{N-8} is as defined above,

(K) -$NR_{N-2}R_{N-3}$ where R_{N-2} and R_{N-3} are the same or different and are as defined above,

(L) -R_{N-4} where R_{N-4} is as defined above,

(M) -O-CO-(C_1-C_6 alkyl),

(N) -O-CO-$NR_{N-8}R_{N-8}$ where R_{N-8} are the same or different and are as defined above, or

(O) -O-(C_1-C_5 alkyl)-COOH;

wherein R_1 is:

(I) C_1-C_6 alkyl,

(II) C_1-C_6 alkyl-S-alkyl

(III) C_1-C_6 alkyl-(C_2-C_6 alkenyl),

(IV) -$(CH_2)_{0-6}$-alkyl -($R_{1\text{-aryl}}$) where $R_{1\text{-aryl}}$ is phenyl, 1-naphthyl, 2-naphthyl, indanyl, indenyl, dihydronaphthyl, or tetralinyl and is unsubstituted or substituted with:

(A) C_1-C_6 alkyl,

(B) –CF_3,

(C) -F, Cl, -Br or –I,

(D) C_1-C_3 alkoxy,

(E) –O-CF_3,

(F) $-NH_2$,

(G) -OH, or

(H) $-C\equiv N$,

(V) $-(CH_2)_{0-6}$-alkyl $-(R_{1\text{-heteroaryl}})$ where $R_{1\text{-heteroaryl}}$ is:

(A) pyridinyl,

(B) pyrimidinyl,

(C) quinolinyl,

(D) indenyl,

(E) indanyl,

(F) benzothiophenyl,

(G) indolyl,

(H) indolinyl,

(I) pyridazinyl,

(J) pyrazinyl,

(K) isoindolyl,

(L) isoquinolyl,

(M) quinazolinyl,

(N) quinoxalinyl,

(O) phthalazinyl,

(P) imidazolyl,

(Q) isoxazolyl,

(R) pyrazolyl,

(S) oxazolyl,

(T) thiazolyl,

(U) indolizinyl,

(V) indazolyl,

(W) benzothiazolyl,

(X) benzimidazolyl,

(Y) benzofuranyl,

(Z) furanyl,

(AA) thienyl,

(BB) pyrrolyl,

(CC) oxadiazolyl,

(DD) thiadiazolyl,

(EE) triazolyl,

(FF) tetrazolyl,

(GG) 1, 4-benzodioxan

(HH) purinyl,

(II) oxazolopyridinyl,

(JJ) imidazopyridinyl,

(KK) isothiazolyl,

(LL) naphthyridinyl,

(MM) cinnolinyl,

(NN) carbazolyl,

(OO) β-carbolinyl,

(PP) isochromanyl,

(QQ) chromanyl,

(RR) furazanyl,

(SS) tetrahydroisoquinoline,

(TT) isoindolinyl,

(UU) isobenzotetrahydrofuranyl,

(VV) isobenzotetrahydrothienyl,

(WW) isobenzothiophenyl,

(XX) benzoxazolyl, or

(YY) pyridopyridinyl,

where the $R_{1\text{-heteroaryl}}$ group is bonded to -alkyl- by any ring atom of the parent $R_{1\text{-heteroaryl}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heteroaryl}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heteroaryl}}$ is unsubstituted or substituted with:

(1) C_1-C_3 alkyl,

(2) $-CF_3$,

(3) -F, Cl, -Br, or I,

(4) C_1-C_3 alkoxy,

(5) –O-CF_3,

(6) -NH_2,

(7) -OH, or

(8) -C≡N,

(VI) -($R_{1\text{-heteroaryl}}$) where $R_{1\text{-heteroaryl}}$ is as defined above,

(VII) - C_1-C_5 alkyl-($R_{1\text{-heterocycle}}$) where $R_{1\text{-heterocycle}}$ is:

(A) morpholinyl,

(B) thiomorpholinyl,

(C) thiomorpholinyl S-oxide,

(D) thiomorpholinyl S,S-dioxide,

(E) piperazinyl,

(F) homopiperazinyl,

(G) pyrrolidinyl,

(H) pyrrolinyl,

(I) tetrahydropyranyl,

(J) piperidinyl,

(K) tetrahydrofuranyl, or

(L) tetrahydrothiophenyl,

where the $R_{1\text{-heterocycle}}$ group is bonded by any atom of the parent $R_{1\text{-heterocycle}}$ group substituted by hydrogen such that the new bond to the $R_{1\text{-heterocycle}}$ group replaces the hydrogen atom and its bond, where $R_{1\text{-heterocycle}}$ is unsubstituted or substituted with:

(1) =O,

(2) C_1-C_3 alkyl,

(3) –CF_3,

(4) -F, Cl, -Br or –I,

(5) C_1-C_3 alkoxy,

(6) –O-CF_3,

(7) -NH_2,

(8) -OH, or

(9) -C≡N, or

(VIII) - $R_{1\text{-heterocycle}}$, where $R_{1\text{-heterocycle}}$ is as defined above;

where R_2 is:

(I) -H,

(II) C_1-C_6 alkyl, or

(III) -$(CH_2)_{0\text{-}4}$-$R_{2\text{-}1}$ where $R_{2\text{-}1}$ is (C_3-C_6)cycloalkyl, $R_{1\text{-aryl}}$ or $R_{1\text{-heteroaryl}}$ where $R_{1\text{-aryl}}$ and $R_{1\text{-heteroaryl}}$ are as defined above;

where R_3, R_4, and R_5, are each independently -H, -CH_3, -$CH(CH_3)_2$, -$CH_2CH(CH_3)_2$, -$CH(CH)CH_2CH_3$, -CH_2CH_2*CH_2, wherein the *CH_2 is bonded to the adjancent NH to form a five membered heterocycle, -CH_2-phenyl, -CH_2(phenol), -CH_2-(3-indole), -CH_2SH, -$CH_2CH_2SCH_3$, -CH_2OH, -$CH(OH)CH_3$,-CH2CH2CH2CH2NH_3^+, -$CH_2CH_2CH_2(NH)C(=NH_2^+)NH_2$, -$CH_2$-(5-(3H-imidazol-1-ium)), -CH_2COO^-, -$CH_2CH_2COO^-$, CH_2CONH_2, or -$CH_2CH_2CONH_2$;

where x is 1 or 0; and

where y is 1 or 0, or pharmaceutically acceptable salts thereof.

106. A method of treatment according to claim 103, 104, or 105, wherein the disease is Alzheimer's disease.

107. A method of treatment according to claim 103, wherein the method is helping prevent or delay the onset of Alzheimer's disease.

108. A method of treatment according to claim 103, wherein the disease is mild cognitive impairment.

109. A method of treatment according to claim 103, wherein the disease is Down's syndrome.

110. A method of treatment according to claim 103, wherein the disease is Hereditary Cerebral Hemorrhage with Amyloidosis of the Dutch-Type.

111. A method of treatment according to claim 103, wherein the disease is cerebral amyloid angiopathy.

112. A method of treatment according to claim 103, wherein the disease is degenerative dementias.

113. A method of treatment according to claim 103, wherein the disease is diffuse Lewy body type of Alzheimer's disease.

114. A method of treatment according to claim 103, wherein the method is treating an existing disease.

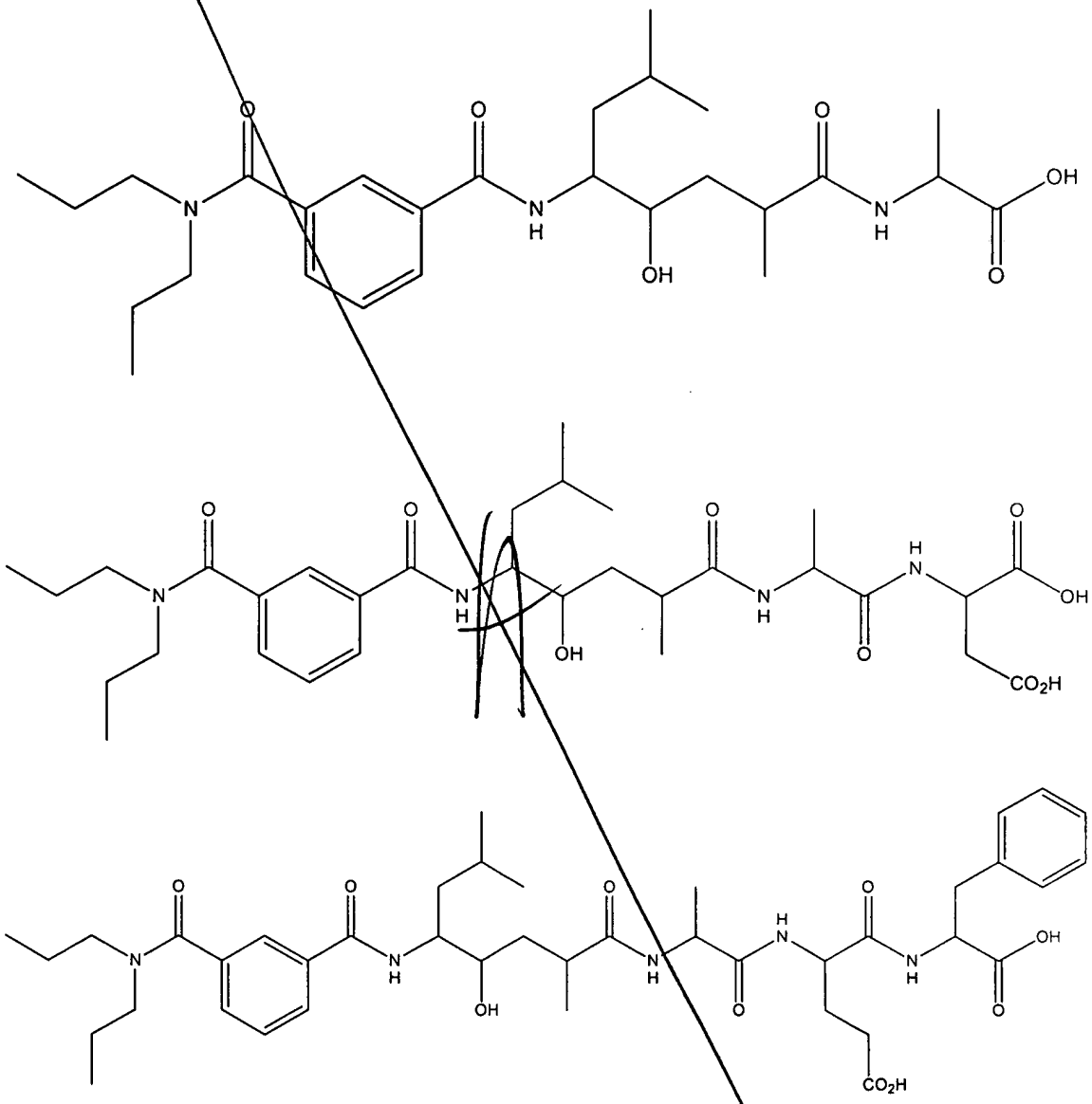
115. A method of treatment according to claim 103, wherein the method is preventing a disease from developing.

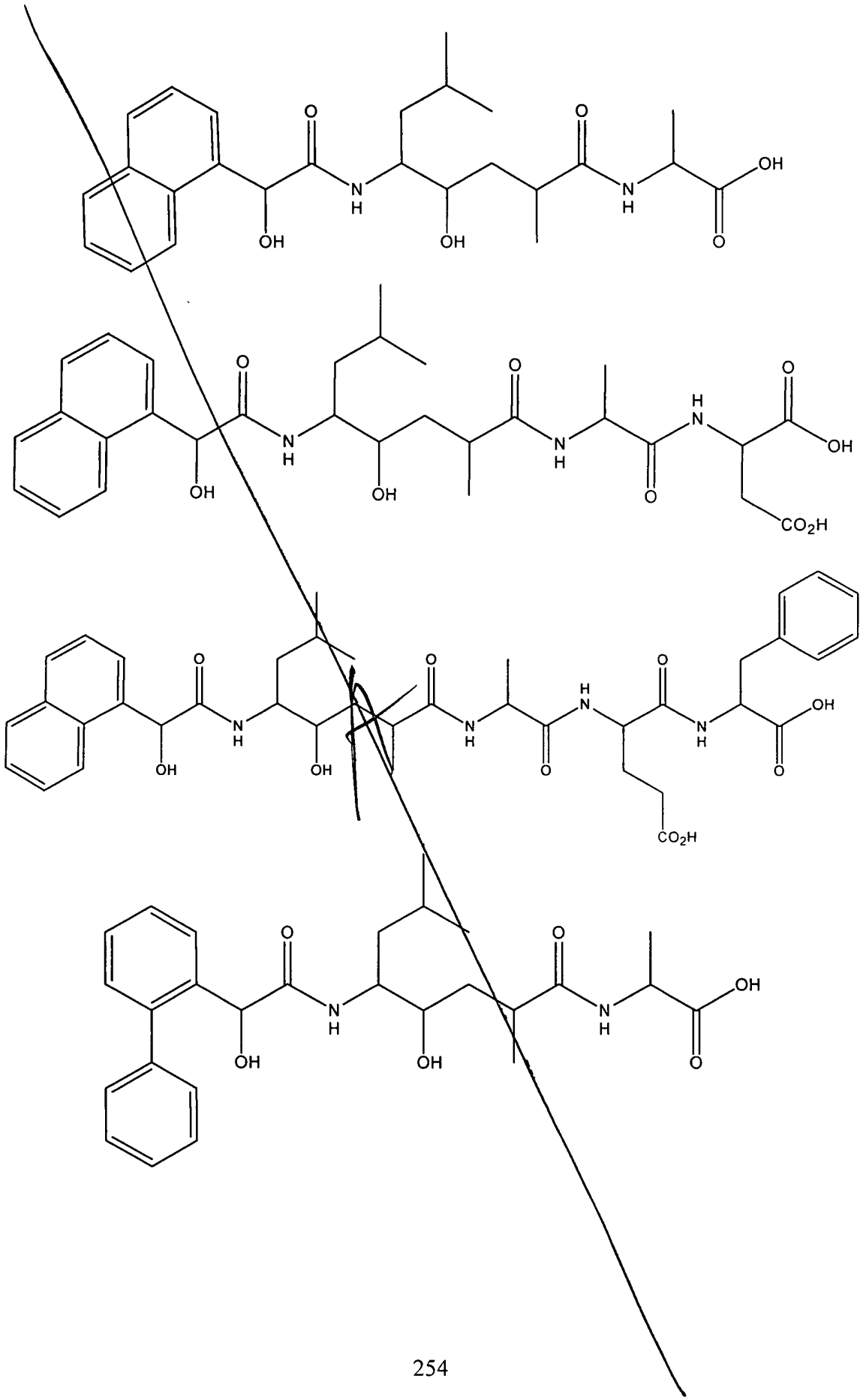
116. A method of treatment according to claim 103, wherein the therapeutically effective amount for oral administration is from about 0.1 mg/day to about 1,000 mg/day; for parenteral, sublingual, intranasal, intrathecal administration is from about 0.5 to about 100 mg/day; for depo administration and implants is from about 0.5 mg/day to about 50 mg/day; for topical administration is from about 0.5 mg/day to about 200 mg/day; for rectal administration is from about 0.5 mg to about 500 mg.

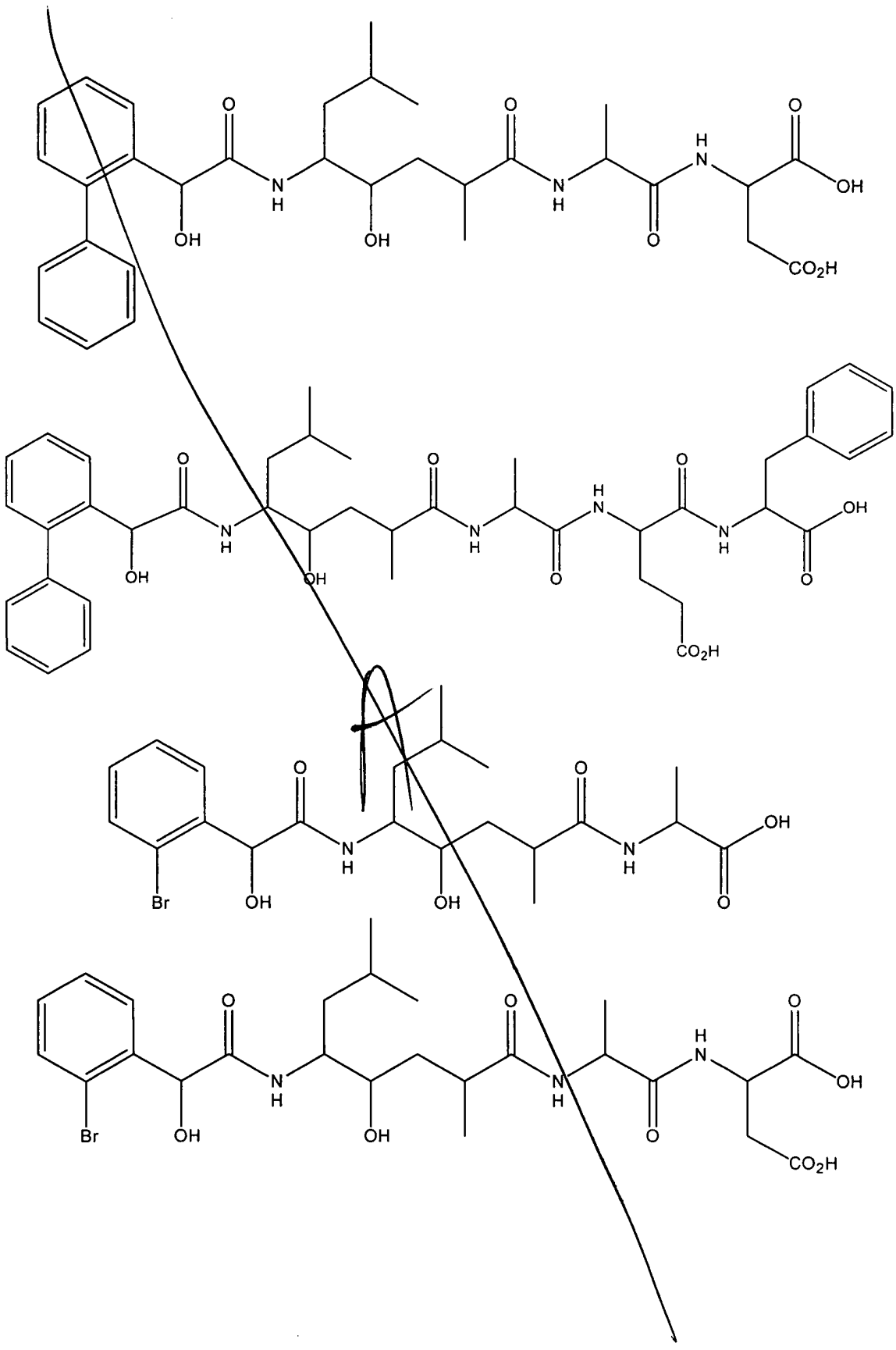
117. A method of treatment according to claim 116, wherein the therapeutically effective amount for oral administration is from about 1 mg/day to about 100 mg/day and for parenteral administration is from about 5 to about 50 mg daily.

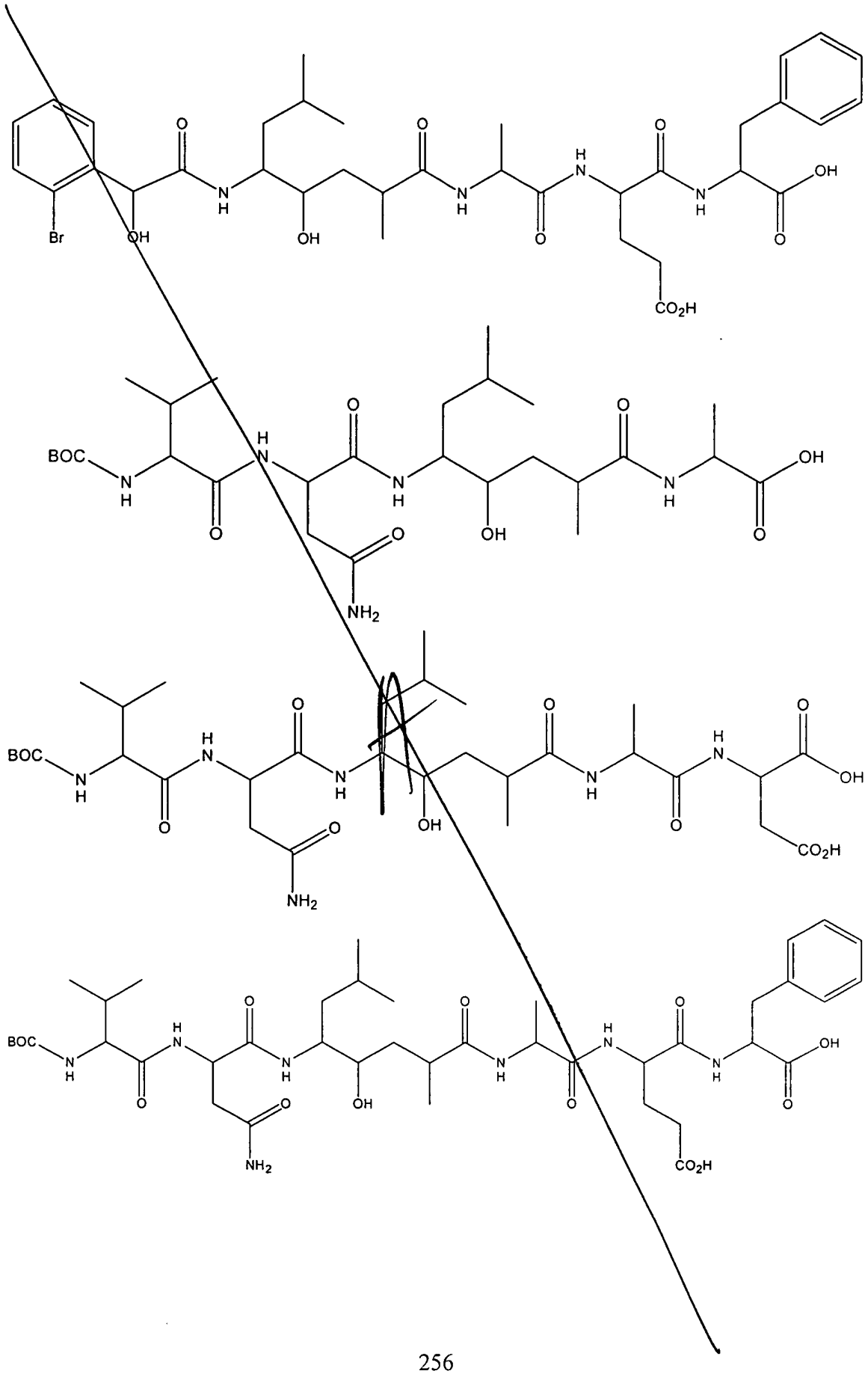
118. A method of treatment according to claim 117 where the therapeutically effective amount for oral administration is from about 5 mg/day to about 50 mg/day.

119. A method of treatment according to claim 103, 104, or 105, wherein the compound is:





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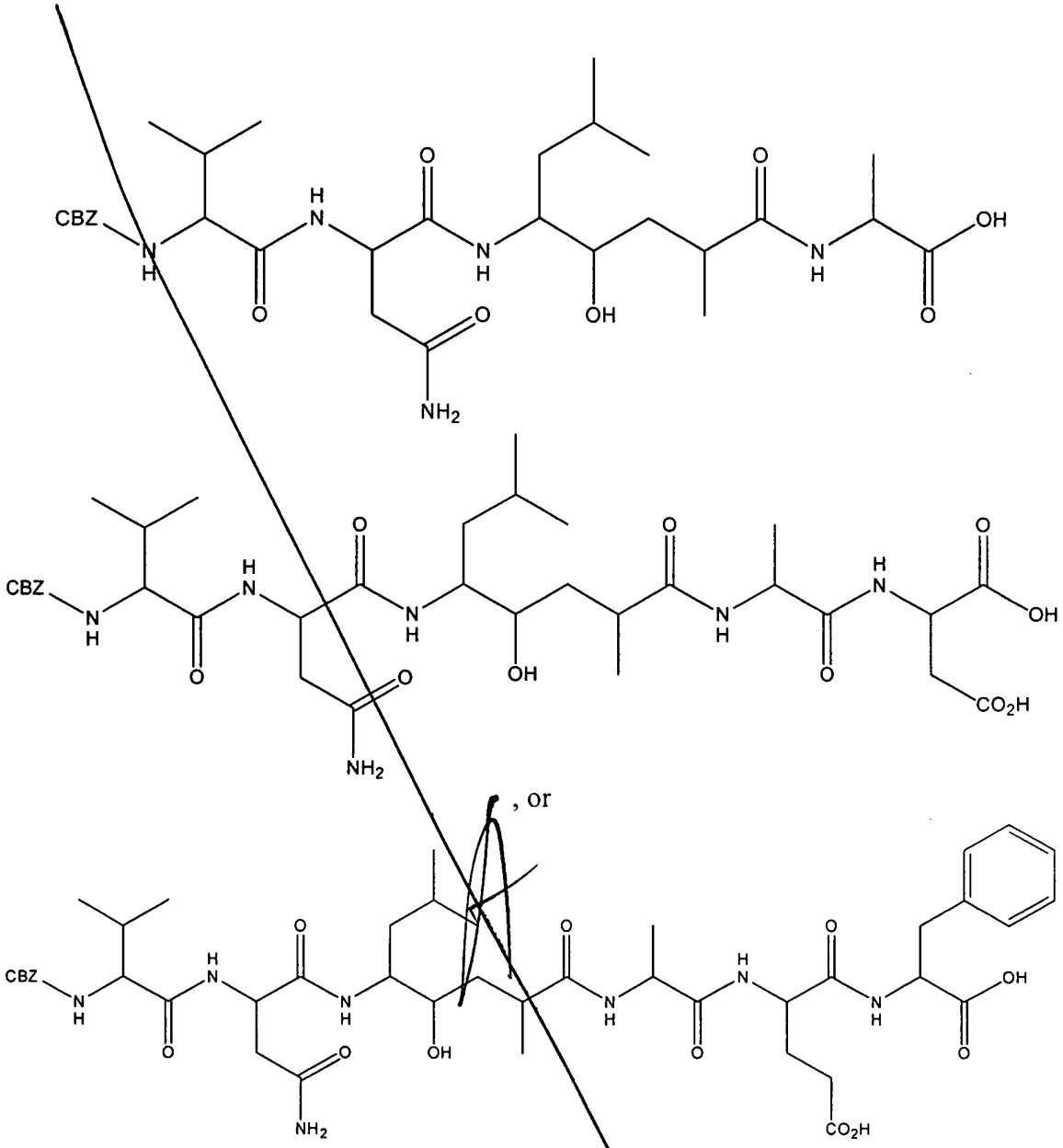


120. A method of treatment according to claim 103, where the pharmaceutically acceptable salt is selected from the group consisting of salts of the following acids: acetic, aspartic, benzenesulfonic, benzoic, bicarbonic, bisulfuric, bitartaric, butyric, calcium edetate, camsylic, carbonic, chlorobenzoic, citric, edetic, edisylic, estolic, esyl, esylic, formic, fumaric, gluceptic, gluconic, glutamic, glycollylarsanilic, hexamic, hexylresorcinoic, hydrabamic, hydrobromic, hydrochloric, hydroiodic, hydroxynaphthoic, isethionic, lactic, lactobionic, maleic, malic, malonic, mandelic, methanesulfonic, methylnitric, methylsulfuric, mucic, muconic, napsylic,

nitric, oxalic, p-nitromethanesulfonic, pamoic, pantothenic, phosphoric, monohydrogen phosphoric, dihydrogen phosphoric, phthalic, polygalactouronic, propionic, salicylic, stearic, succinic, succinic, sulfamic, sulfanilic, sulfonic, sulfuric, tannic, tartaric, teoclic and toluenesulfonic.

121. A method for inhibiting beta-secretase activity, comprising exposing said beta-secretase to an effective inhibitory amount of a compound according to claim 1, 48 or 60.

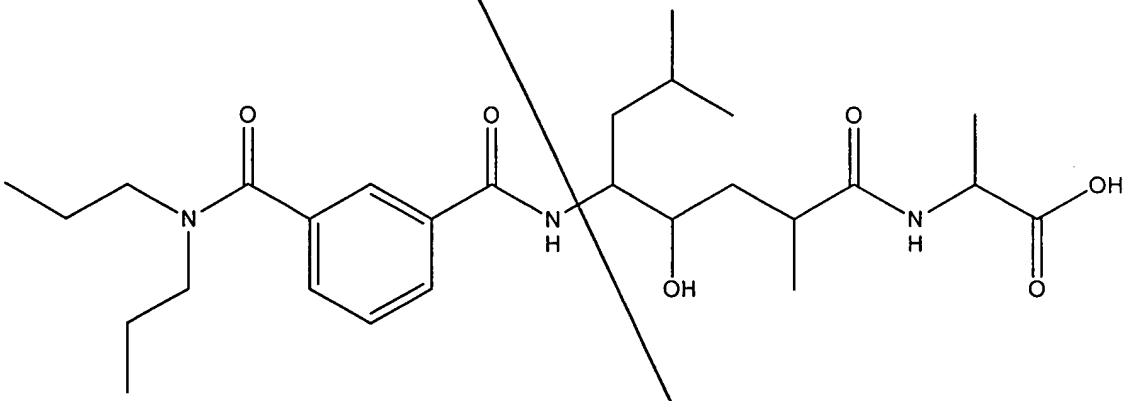
122. The method of claim 121, wherein said beta-secretase is exposed to said compound *in vitro*.

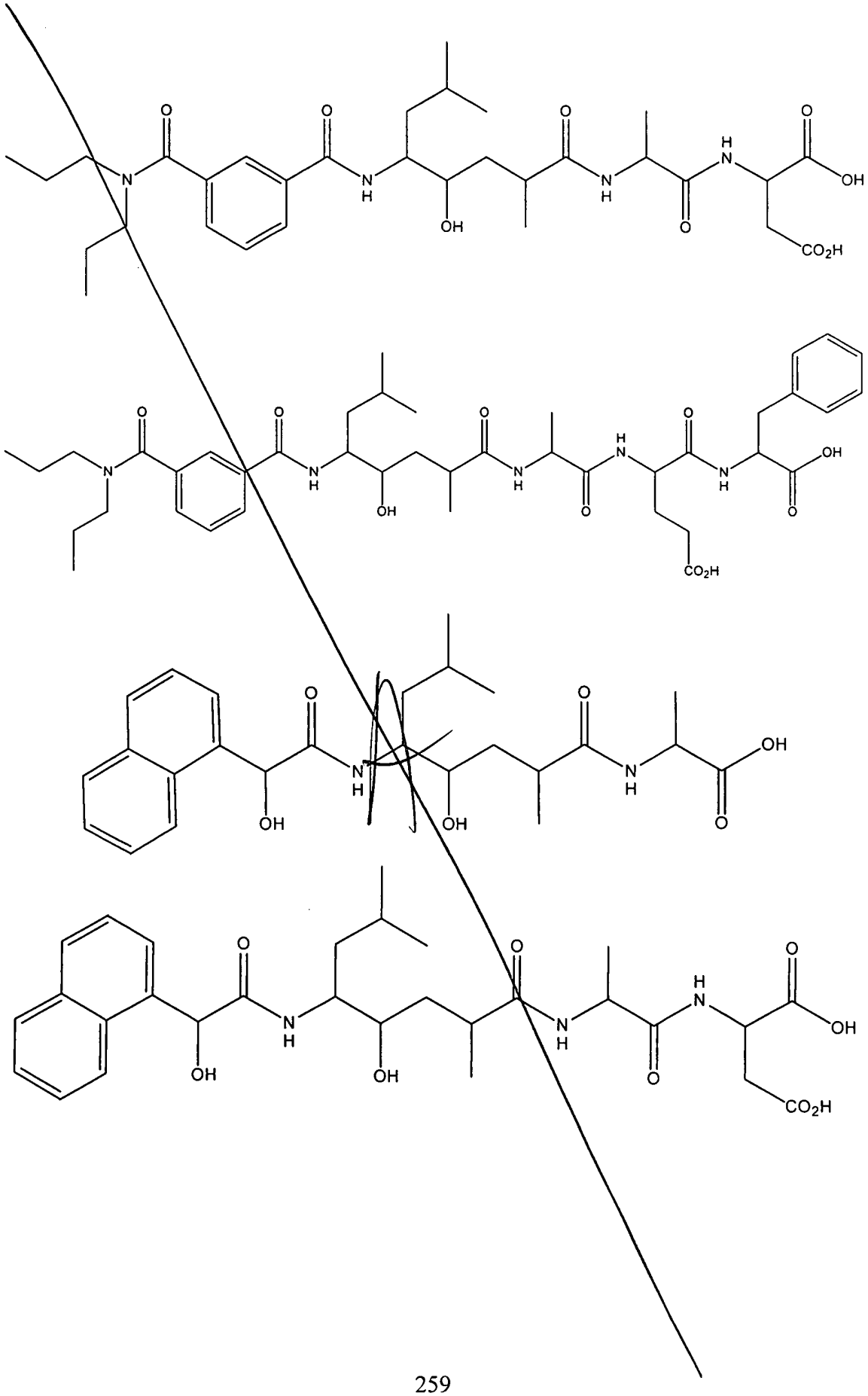
123. The method of claim 121, wherein said beta-secretase is exposed to said compound in a cell.

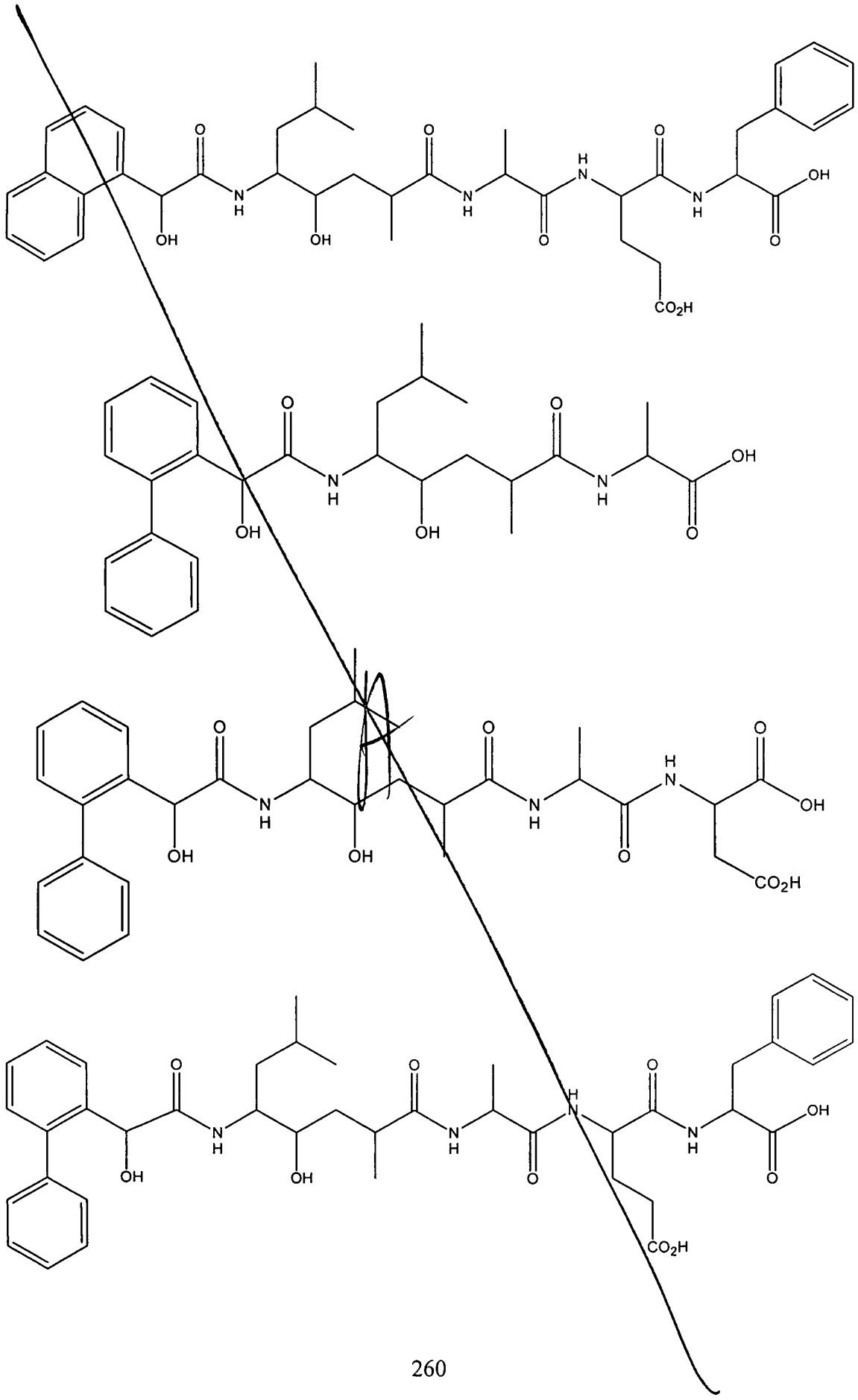
124. The method of claim 123, wherein said cell is in an animal.

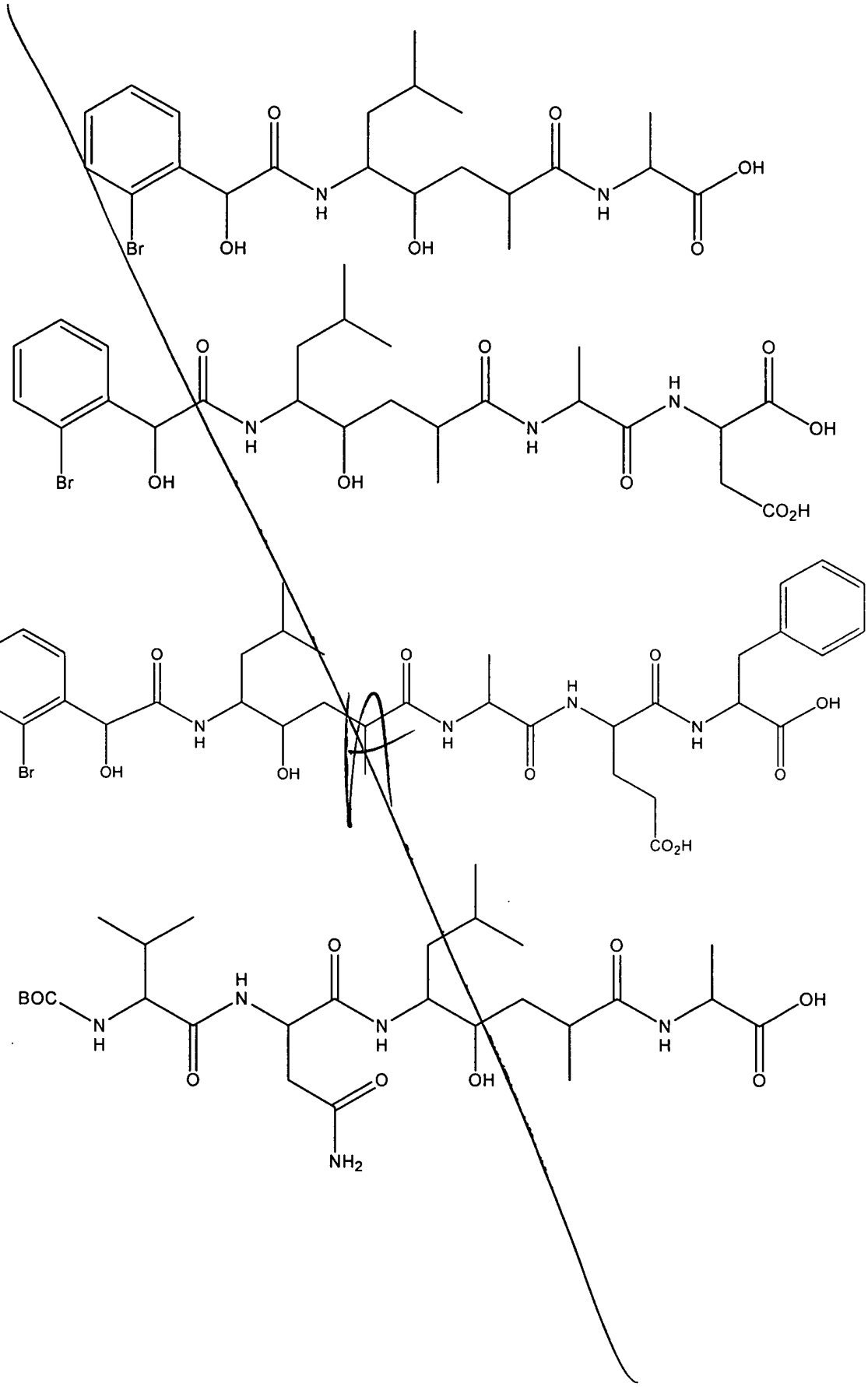
125. The method of claim 124, wherein said animal is a human.

126. The method of claim 121, wherein the compound is selected from:








Br
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BOC
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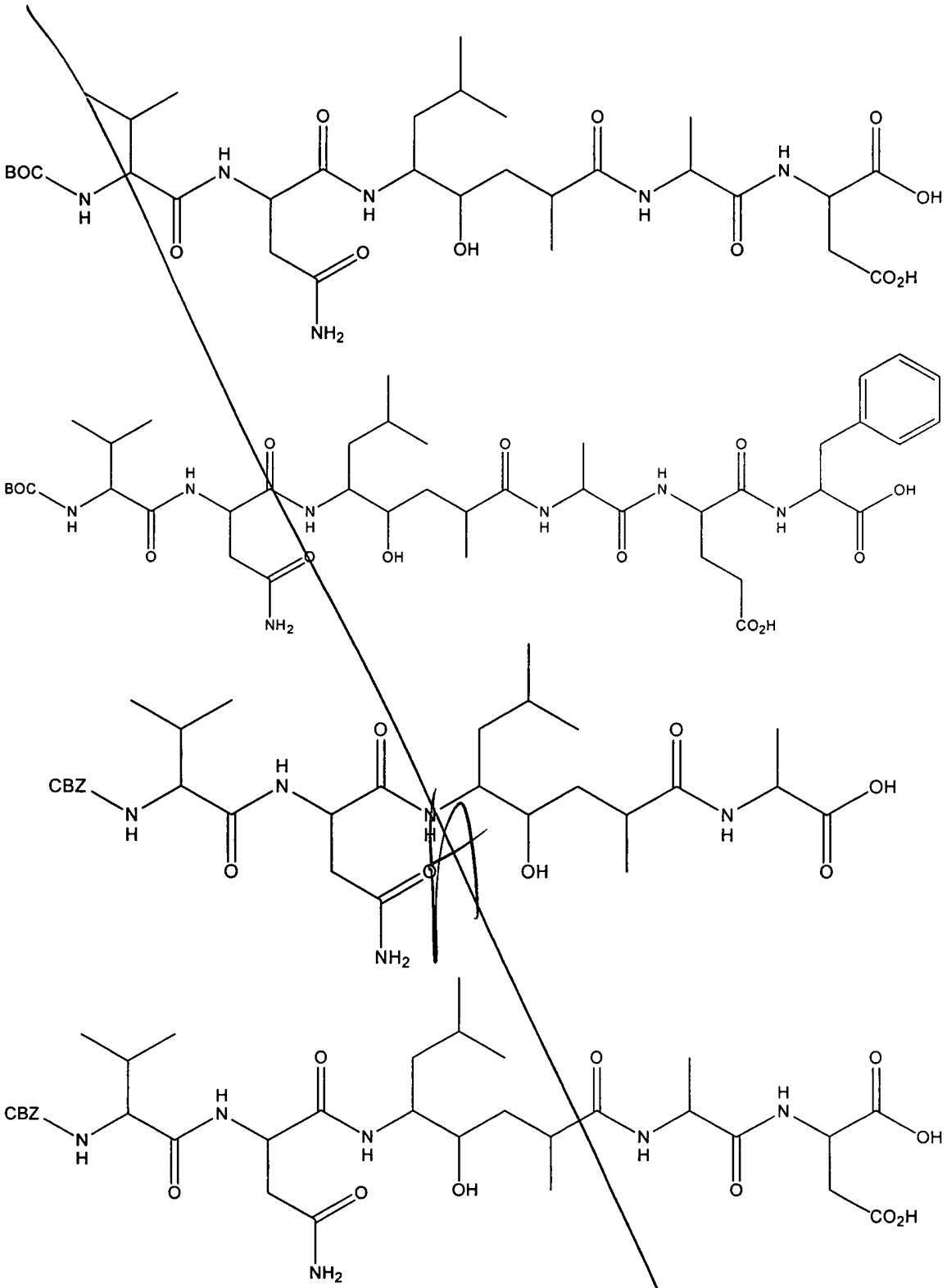
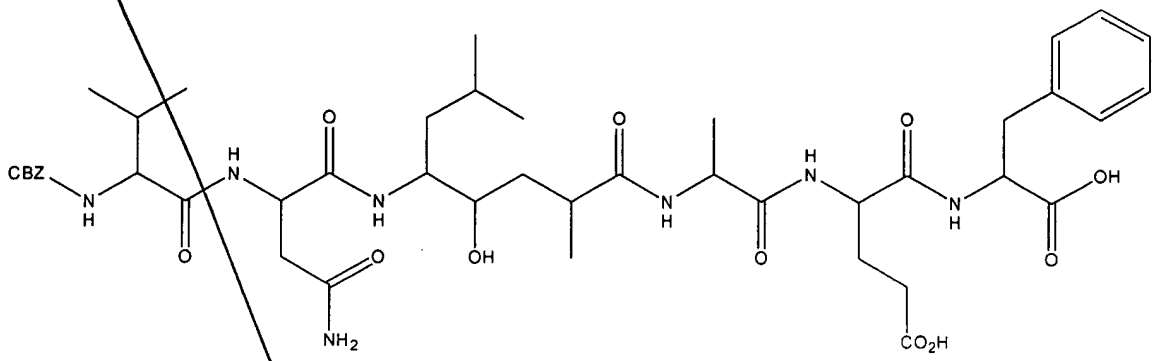
NH2
OH



, or



127. A method for inhibiting beta-secretase activity, comprising exposing said beta-secretase to an effective inhibitory amount of a compound according to claim 1.

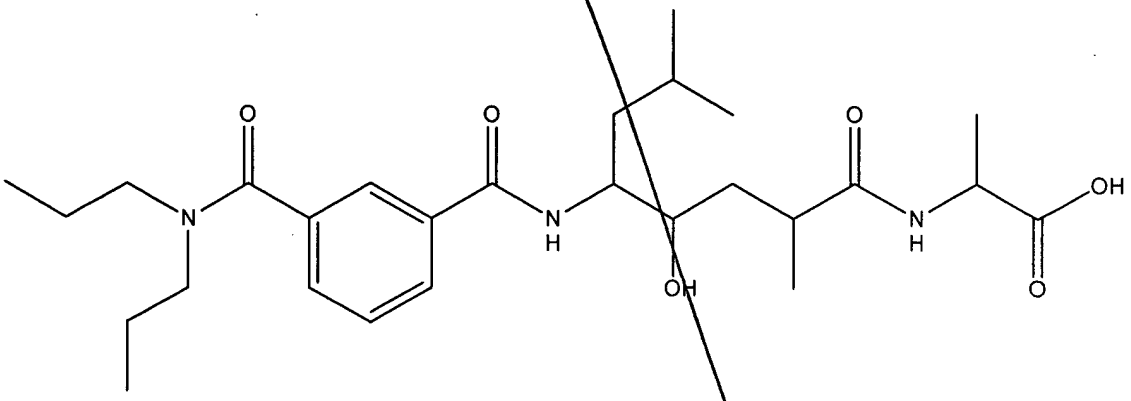
128. The method of claim 127, wherein said beta-secretase is exposed to said compound *in vitro*.

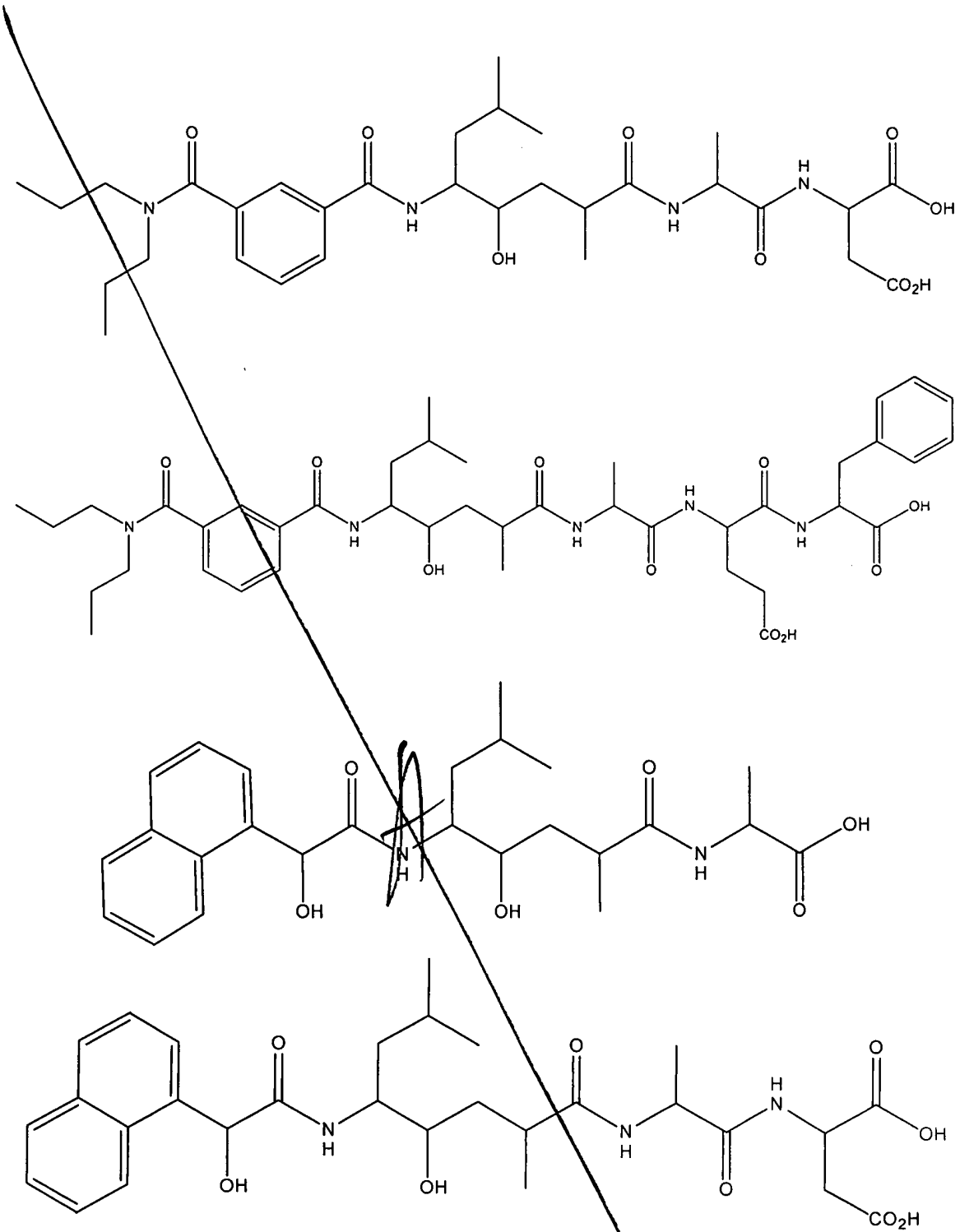
129. The method of claim 127, wherein said beta-secretase is exposed to said compound in a cell.

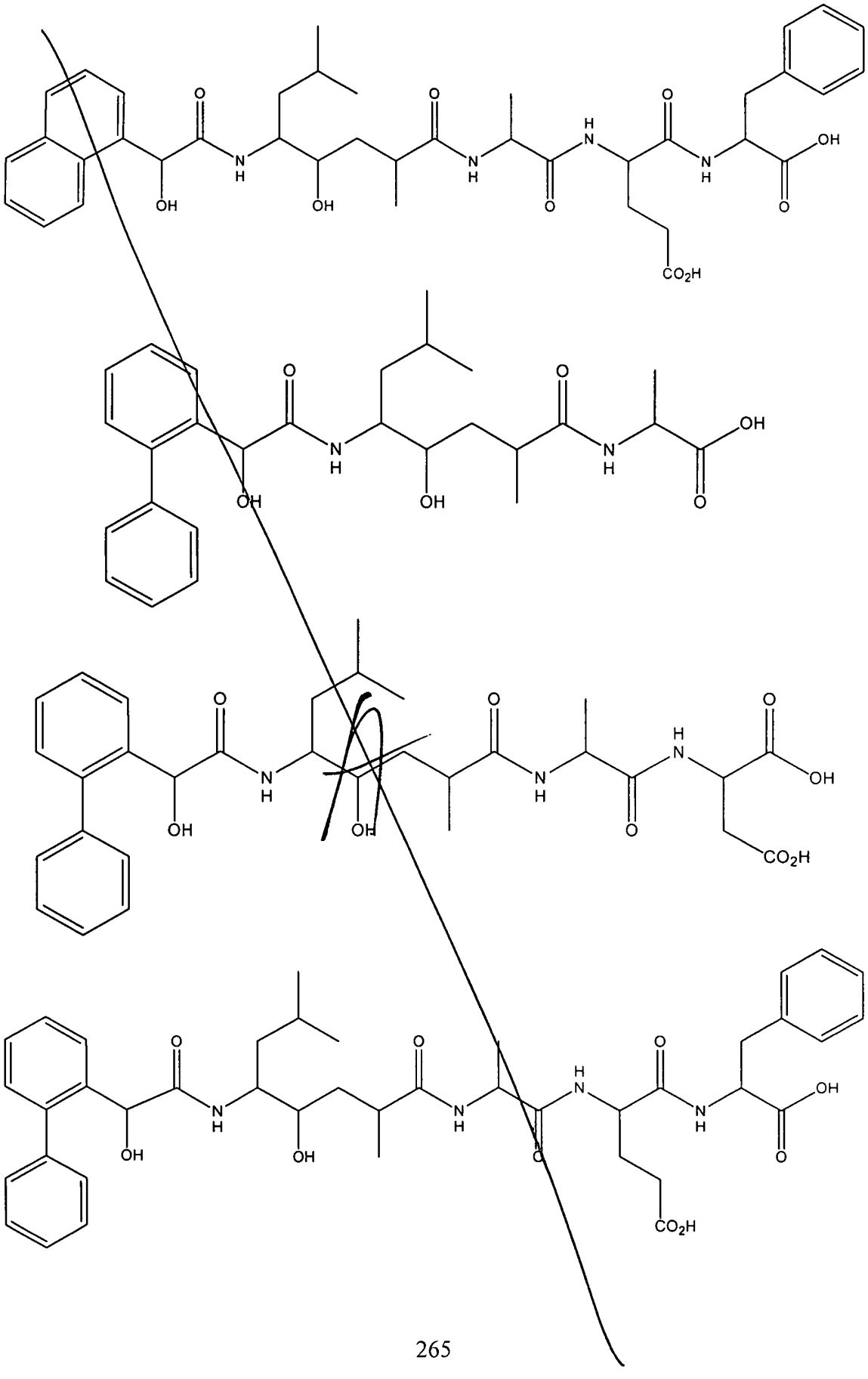
130. The method of claim 129, wherein said cell is in an animal.

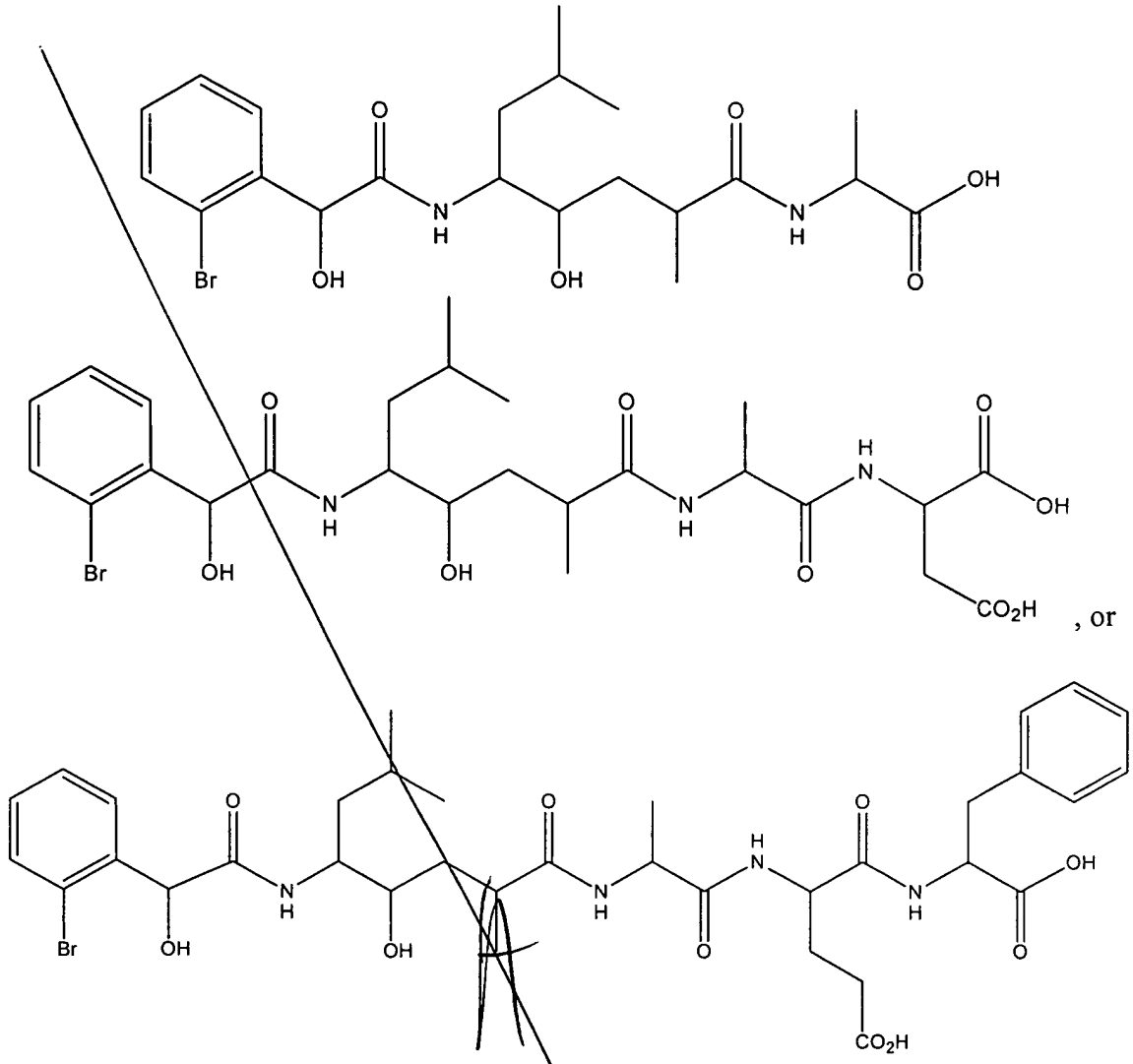
131. The method of claim 130, wherein said animal is a human.

132. The method of claim 127, wherein the compound is selected from:









, or

133. A method for inhibiting cleavage of amyloid precursor protein (APP), in a reaction mixture, at a site between Met596 and Asp597, numbered for the APP-695 amino acid isotype; or at a corresponding site of an isotype or mutant thereof, comprising exposing said reaction mixture to an effective inhibitory amount of a compound according to claim 1.

134. The method of claim 133, wherein said cleavage site is between Met652 and Asp653, numbered for the APP-751 isotype; between Met 671 and Asp 672, numbered for the APP-770 isotype; between Leu596 and Asp597 of the APP-695

Swedish Mutation; between Leu652 and Asp653 of the APP-751 Swedish Mutation; or between Leu671 and Asp672 of the APP-770 Swedish Mutation.

135. The method of claim 133, wherein said reaction mixture is exposed *in vitro*.

136. The method of claim 133, wherein said reaction mixture is exposed in a cell.

137. The method of claim 136, wherein said cell is an animal cell.

138. The method of claim 137, wherein said cell is a human cell.

139. A method for inhibiting cleavage of amyloid precursor protein (APP), in a reaction mixture, at a site between Met596 and Asp597, numbered for the APP-695 amino acid isotype; or at a corresponding site of an isotype or mutant thereof, comprising exposing said reaction mixture to an effective inhibitory amount of a compound according to claim 1.

140. The method of claim 139, wherein said cleavage site is between Met652 and Asp653, numbered for the APP-751 isotype; between Met 671 and Asp 672, numbered for the APP-770 isotype; between Leu596 and Asp597 of the APP-695 Swedish Mutation; between Leu652 and Asp653 of the APP-751 Swedish Mutation; or between Leu671 and Asp672 of the APP-770 Swedish Mutation.

141. The method of claim 139, wherein said reaction mixture is exposed *in vitro*.

142. The method of claim 139, wherein said reaction mixture is exposed in a cell.

143. The method of claim 142, wherein said cell is an animal cell.

144. The method of claim 143, wherein said cell is a human cell.

145. A method for inhibiting production of amyloid beta peptide (A beta) in a cell, comprising administering to said cell an effective inhibitory amount of a compound according to claim 1.

146. The method of claim 145, wherein said administering is to an animal.

147. The method of claim 146, wherein said administering is to a human.

148. A method for inhibiting production of amyloid beta peptide (A beta) in a cell, comprising administering to said cell an effective inhibitory amount of a compound according to claim 1.

149. The method of claim 148, wherein said administering is to an animal.

150. The method of claim 149, wherein said administering is to a human.

151. A method for inhibiting the production of beta-amyloid plaque in an animal, comprising administering to said animal an effective inhibitory amount of a compound according to claim 1.

152. The method of claim 151, wherein said animal is a human.

153. A method for inhibiting the production of beta-amyloid plaque in an animal, comprising administering to said animal an effective inhibitory amount of a compound according to claim 1.

154. The method of claim 153, wherein said animal is a human.

155. A method for treating or preventing a disease characterized by beta-amyloid deposits in the brain comprising administering to a patient an effective therapeutic amount of a compound according to claim 1.

156. The method of claim 155, wherein said therapeutic amount is in the range of from about 0.1 to about 1000 mg/day.

157. The method of claim 155, wherein said therapeutic amount is in the range of from about 15 to about 1500 mg/day.

158. The method of claim 156, wherein said therapeutic amount is in the range of from about 1 to about 100 mg/day.

159. The method of claim 158, wherein said therapeutic amount is in the range of from about 5 to about 50 mg/day.

160. The method of claim 156, wherein said disease is Alzheimer's disease.

161. The method of claim 156, wherein said disease is Mild Cognitive Impairment, Down's Syndrome, or Hereditary Cerebral Hemmorrhage with Amyloidosis of the Dutch Type.

162. A method for treating or preventing a disease characterized by beta-amyloid deposits in the brain comprising administering to a patient an effective therapeutic amount of a compound according to claim 1.

163. The method of claim 162, wherein said therapeutic amount is in the range of from about 0.1 to about 1000 mg/day.

164. The method of claim 162, wherein said therapeutic amount is in the range of from about 15 to about 1500 mg/day.

165. The method of claim 163, wherein said therapeutic amount is in the range of from about 1 to about 100 mg/day.

166. The method of claim 165, wherein said therapeutic amount is in the range of from about 5 to about 50 mg/day.

167. The method of claim 161, wherein said disease is Alzheimer's disease.

168. The method of claim 161, wherein said disease is Mild Cognitive Impairment, Down's Syndrome, or Hereditary Cerebral Hemmorrhage with Amyloidosis of the Dutch Type.

169. A composition comprising beta-secretase complexed with a compound according to claim 1.

170. A method for producing a beta-secretase complex comprising: exposing beta-secretase to a compound according to claim 1, or a pharmaceutically acceptable salt thereof in a reaction mixture under conditions suitable for the production of said complex.

171. The method of claim 170, where said exposing is *in vitro.*

172. The method of claim 171, wherein said reaction mixture is a cell.

173. A kit comprising component parts capable of being assembled, wherein at least one component part comprises a compound according to claim 1, enclosed in a container.

174. The kit of claim 173, wherein said compound is lyophilized and at least one further component part comprises a diluent.

175. A kit comprising a plurality of containers, each container comprising one or more unit dose of a compound according to claim 1.

176. The kit of claim 175, wherein each container is adapted for oral delivery and comprises a tablet, gel, or capsule.

177. The kit of claim 175, wherein each container is adapted for parenternal delivery and comprises a depot product, syringe, ampoule, or vial.

178. The kit of claim 175, wherein each container is adapted for topical delivery and comprises a patch, medipad, ointment, or cream.

179. A kit comprising a plurality of containers, each container comprising one or more unit dose of a compound according to claim 1.

180. The kit of claim 179, wherein each container is adapted for oral delivery and comprises a tablet, gel, or capsule.

181. The kit of claim 179, wherein each container is adapted for parenternal delivery and comprises a depot product, syringe, ampoule, or vial.

182. The kit of claim 179, wherein each container is adapted for topical delivery and comprises a patch, medipad, ointment, or cream.

183. A kit comprising a compound according to claim 1;and

one or more therapeutic agent selected from the group consisting of an antioxidant, an anti-inflamatory, a gamma secretase inhibitor, a neurotrophic agent, an acetylcholinesterase inhibitor, a statin, an A beta peptide, and an anti-A beta antibody.

184. A composition comprising a compound according to claim 1; and an inert diluent or edible carrier.

185. The composition of claim 184, wherein said carrier is an oil.

186. A composition comprising a compound according to claim 1; and a binder, excipient, disintegrating agent, lubricant, or gildant.

187. A composition comprising a compound according to claim 1 disposed in a cream, ointment, or patch.

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